REPORT RESUMES

ED 003 443 24
TEACHER AIDE SERVICE AS A MEANS OF ENRICHING A SOPHOMORE COURSE IN EDUCATIONAL PSYCHOLOGY.
BY- LANG, GERHARD HOCHMAN, IRVIN
FAIRLEIGH DICKINSON UNIV., TEANECK, N.J.
REPORT NUMBER CRP-S-028 PUB DATE 64
EDRS PRICE MF-$0.27 HC-$7.40 185P.

DESCRIPTORS- EDUCATIONAL IMPROVEMENT, *EDUCATIONAL METHODS, *EDUCATIONAL PSYCHOLOGY, EDUCATIONAL RESEARCH, *PRESERVICE EDUCATION, *TEACHER EDUCATION, TEACHER AIDES, STUDENT TEACHING, TEANECK, NEW JERSEY, TEACHER AIDE PROGRAM (TAP)

TO DETERMINE THE EXTENT TO WHICH CLASSROOM TEACHING EXPERIENCE CAN MAKE EDUCATIONAL PSYCHOLOGY A MORE USEFUL COURSE, A TEACHER AIDE PROGRAM WAS ESTABLISHED TO PROVIDE LABORATORY EXPERIENCE FOR STUDENTS ENROLLED IN EDUCATIONAL PSYCHOLOGY COURSES. IT WAS HOPED THIS STUDY WOULD GIVE INDICATION OF THE VALUE OF OTHER KINDS OF LABORATORY EXPERIENCES TO BE OFFERED IN CONJUNCTION WITH OTHER EDUCATIONAL COURSES. SAMPLE STUDENTS OF A SOPHOMORE EDUCATIONAL PSYCHOLOGY COURSE WERE GROUPED INTO ONE EXPERIMENTAL AND TWO CONTROL CLASSES. THE EXPERIMENTAL CLASS COMBINED CLASSROOM STUDY WITH A TEACHER AIDE PROGRAM (TAP) IN WHICH THEY TAUGHT FOR 2 HOURS A WEEK IN LOCAL SCHOOLS. AT THE END OF THE PROGRAM, TEST RESULTS SHOWED NO SIGNIFICANT DIFFERENCE IN THE THEORETICAL KNOWLEDGE ACQUIRED BY THE THREE GROUPS, NOR DID THE KNOWLEDGE ACQUIRED NECESSARILY CONFIRM THEIR DECISION TO BECOME TEACHERS. TAP WAS, HOWEVER, FAVORABLY RECEIVED BY THE PARTICIPATING STUDENTS AND TEACHERS. IT WAS SUGGESTED THAT NONEDUCATION MAJORS BE ASKED TO PARTICIPATE TO SEE IF INTEREST IN A TEACHING CAREER COULD BE GENERATED. FURTHER RESEARCH WAS SUGGESTED TO DEVELOP TESTS WHICH MEASURE CONCEPTUAL AND ATTITUDINAL CHANGES IN STUDENT DEVELOPMENT. (PM)

ED003443

TEACHER AIDE SERVICE AS A MEANS OF ENRICHING A SOPHOMORE COURSE IN EDUCATIONAL PSYCHOLOGY

~~OFFICIAL RESEARCH FILE COPY~~

COOPERATIVE RESEARCH PROJECT NO. S-028

GERHARD LANG
IRVIN HOCHMAN

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education
This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.

FAIRLEIGH DICKINSON UNIVERSITY

TEACHER AIDE SERVICE AS A MEANS OF ENRICHING A SOPHOMORE COURSE IN EDUCATIONAL PSYCHOLOGY

Cooperative Research Project No. S-028

Gerhard Lang, Ph.D., Project Director

Irvin Hochman, Ph.D., Project Co-Director

Fairleigh Dickinson University
Teaneck, New Jersey

1964

The research reported herein was supported by the
Cooperative Research Program of the Office of Education,
U. S. Department of Health, Education, and Welfare.

PREFACE

This project represents the joint efforts of many people. We gratefully acknowledge the splendid cooperation afforded us by the administrative officers of the Teaneck School System and the Fairleigh Dickinson University. We also wish to thank our colleagues in the faculties of psychology and education at the Fairleigh Dickinson University for their help and encouragement.

We are indebted to Dr. John J. O'Neill, Dean of the College of Education, and Dr. Amedeo G. Sferra, Chairman, Department of Psychology, Teaneck Campus, for their assistance in planning this project and for facilitating our work.

Dr. Maurie Hillson, Professor of Education, was most helpful in opening up channels of communication, getting the project underway, and in his capacity as consultant, offered many helpful suggestions.

Marinus G. Galanti, Dean of the Teaneck Campus, and Loyd Haberly, Dean of the College of Liberal Arts. not only offered us much encouragement, but helped expedite the work of the project in many practical ways.

We are particularly grateful to M. Ray Kelly, Elementary School Curriculum Coordinator, and James L. Winn, Secondary School Coordinator. They patiently worked out the many details of student assignments, served as seminar leaders, and gave us the benefit of their expert knowledge of their schools.

We are deeply indebted to the cooperating teachers who most generously assumed responsibility for the teacher aides placed in their classrooms.

May we also single out for recognition the seven seminar leaders who helped our students integrate the theoretical content of our lectures with their classroom observations and experiences.

Without the support of Dr. Harvey B. Scribner, Superintendent, and the Teaneck Board of Education, our project would not have been at all possible.

Dr. Robert L. Thorndike, Head of the Department of Psychological Foundations and Services, Teachers College, Columbia University, gave us the benefit of his expert knowledge of educational psychology and research methodology. His suggestions were invaluable.

James N. Vlamis, Director of the Statistical Computer Laboratory, and Mendl Hoffman, Abacus Associates, competently supplied much of the data upon which this study is based.

Finally, may we acknowledge our debt to the many students who served as our subjects. We would like to think that they obtained some benefits from participating in the study, not the least being the knowledge that they have contributed in some small way to the improvement of teacher training.

PERSONNEL
OF PROJECT #S-028

Project Director: Gerhard Lang, Ph.D.

Project Co-Director: Irvin Hochman, Ph.D.

Project Secretary

Louise C. Klein

Cooperating Teachers

Margaret Alagia
Mario E. Amato
J. Antinoro
Frank T. Arone
Rona Burak
Susan Candell
Sarah Clatworthy
Ira Cebulash
E. Clausen
James R. Delaney
Franklin P. Gould
Joyce Greenup
Albert Guskind
Margaret Heller
Aimee Jacod
Mary Kahiser
Eleanor Kasmir
Bette Kelly
Margaret Kirsch
Donald Kouba
Bernice Levine
Joan M. Mazza
Cornelia Meyer
Eileen Pierce
William F. Powley
John L. Reid
Sara Reissman
John L. Salek
Lucy Stamilla
Esther Van Duzer
Diane Vojack

Seminar Leaders

Vincentine Cundari
M. Ray Kelly
Arthur Lewis
Edna McIlfatrick
Emil Massa
Kenneth J. Wangler
James L. Winn

Research Assistants

Norman Breyer
Richard S. Klein
Robert Epstein

Clerical Assistants

Elizabeth F. Bardet
Edward Bremer
Frances B. Cohen
Ira Decker
Neal M. Henkel
Stephen Hochman
Ruth Langsam
Judith E. Leonard
Eva Liebman
Judith Smith

TABLE OF CONTENTS

Page

PREFACE ii

PERSONNEL OF PROJECT S-028. iii

LIST OF TABLES. vii

CHAPTER

I. INTRODUCTION. 1

  Problem. 1

  Related Literature 2

    The Current Educational Scene 2
    Pre-service Training of Teachers and the Role of Directed Experiences 2
    Educational Psychology: Objectives, Content, Proposals for Improvement. 3
    Teacher Aides 4

  Objective. 5

  Questions 5

  Operational Definitions. 6

II. METHOD. 7

  Sample 7

  Treatment. 7

  Research Instruments 9

    Achievement Test in Educational Psychology. 9
    Case Studies in Teaching: Forms A and B 9
    Student Questionnaire: Forms A and B. 10
    Interview Schedule. 10
    Rating Forms and Reactionnaires 11
    Other Forms 11

  Procedure. 11

    Preliminary Planning Stage. 11
    Experimental Stage. 12
    Data Analysis and Concluding Stage. 14

CHAPTER Page

III. RESULTS AND CONCLUSIONS 15

Question No. 1 18

Question No. 2 23

Question No. 3 28

Ideal Vs. Realistic Preferences for a Teaching or Nonteaching Career 31

Stability of Choice of Teaching Level and/or Subject 35

Motives for Teaching 35

Ratings by Cooperating Teachers and Seminar Leaders of Teacher Aides' Potential for Becoming Good Teachers 36

The Teacher Aide Program 43

- Perceptions of Program by Teacher Aides 43
  - Mid-semester Evaluation of Program 43
  - Interview Data 44
- Perceptions of Program by Cooperating Teachers. 49
- Perceptions of Program by Seminar Leaders 50
- Summary: Perceptions of the Teacher Aide Program by Teacher Aides, Cooperating Teachers, and Seminar Leaders 52

IV. DISCUSSION. 54

Question No. 1 55

Question No. 2 56

Question No. 3 57

Auxiliary Analyses 57

Discussion of Qualitative Findings 58

- Recommendations for Developing Teacher Aide Programs. . . . 58
  - Selection of Schools and Cooperating Personnel 59
  - Establishment of Working Relationships with the School Staffs 60
  - Nature of the Aide's Learning Experiences. 60
  - Evaluation of the Aide's Progress and Growth 61
  - Evaluation of the Cooperating Teachers and Seminar Leaders 62

Suggestions for Further Research 62

V. SUMMARY 64

CHAPTER Page

REFERENCES. 67

APPENDIX A: Tables 36-41. . . . . A-1

APPENDIX B: Research Instruments and Forms Used B-1

APPENDIX C: Guides for Cooperating Teachers and Teacher Aides C-1

APPENDIX D: Course Syllabus D-1

APPENDIX E: Master List of Teacher Roles, Duties, and Assignments E-1

APPENDIX F: Student Data of Instructor Robbins. F-1

LIST OF TABLES

Table Page

1. Distribution of Subjects by Instructors and Treatment Groups . . . 8

2. Means and Standard Deviations of Scores on Pretests. 15

3. Analysis of Variance of Scores on Achievement Test in Educational Psychology Used as Pretest. 16

4. Analysis of Variance of Scores on Case Studies in Teaching - Form A Used as Pretest. 16

5. Analysis of Variance of Number of Teacher Roles Correctly Listed in Student Questionnaire - Form A Used as Pretest 17

6. Analysis of Variance of Number of Teacher Duties Correctly Listed in Student Questionnaire - Form A Used as Pretest 17

7. Analysis of Variance of Scale Ratings on Certainty of Decision to Teach Recorded in Student Questionnaire - Form A Used as Pretest 17

8. Means and Standard Deviations of Gain Scores on Achievement Tests in Educational Psychology by Instructors and Treatment Groups. 19

9. Means and Standard Deviations of Gain Scores on Case Studies in Teaching by Instructors and Treatment Groups. 20

10. Tests of Significance of Mean Gain Scores on Achievement Tests in Educational Psychology 21

11. Tests of Significance of Mean Gain Scores on Case Studies in Teaching. 21

12. Analysis of Variance of Gain Scores on Achievement Tests in Educational Psychology (Instructors by Treatment) 22

13. Analysis of Variance of Gain Scores on Case Studies in Teaching (Instructors by Treatment). 22

14. Means and Standard Deviations of Gain Scores on Number of Teacher Roles Correctly Listed by Instructors and Treatment Groups. 24

15. Means and Standard Deviations of Gain Scores on Number of Teacher Duties Correctly Listed by Instructors and Treatment Groups. 25

16. Tests of Significance of Mean Gain Scores on Number of Teacher Roles Correctly Listed in Student Questionnaires. 26

Table Page

17. Tests of Significance of Mean Gain Scores on Number of Teacher Duties Correctly Listed in Student Questionnaires . . . 26

18. Analysis of Variance of Gain Scores on Number of Teacher Roles Correctly Listed in Student Questionnaires (Instructors by Treatment). 27

19. Analysis of Variance of Gain Scores on Number of Teacher Duties Correctly Listed in Student Questionnaires (Instructors by Treatment). 27

20. Means and Standard Deviations of Changes in Scale Ratings on Certainty of Decision to Teach by Instructors and Treatment Groups. 29

21. Tests of Significance of Mean Changes in Scale Ratings on Certainty of Decision to Teach Recorded in Student Questionnaires. 30

22. Analysis of Variance of Mean Changes in Scale Ratings on Certainty of Decision to Teach Recorded in Student Questionnaires (Instructors by Treatment) 30

23. Ideal Vs. Realistic Preferences for Teaching or Non-teaching Careers (Pretest) 32

24. Ideal Vs. Realistic Preferences for Teaching or Non-teaching Careers (Posttest). 32

25. Chi Square Analysis of Ideal Vs. Realistic Preferences for Teaching or Non-teaching Careers (Pretest). 34

26. Chi Square Analysis of Ideal Vs. Realistic Preferences for Teaching or Non-teaching Careers (Posttest) 34

27. Similarity and Difference of Choice of Teaching Level and/or Subject Based on Responses to Student Questionnaires. 35

28. Percentage of Responses on The Scale of Motives for Teaching Recorded in Student Questionnaire - Form A. 37

29. Factor Loadings of 25 Reasons for Teaching 39

30. Description of Factors Derived from Responses to the Scale of Motives for Teaching. 41

31. Ratings by Cooperating Teachers and Seminar Leaders of Teacher Aides' Potential for Becoming Good Teachers 42

32. Extent of Agreement Between Cooperating Teachers (CT) and Seminar Leaders (SL) in Rating Teacher Aides' Potential for Becoming Good Teachers 42

Table Page

33. Estimate of Time (Hours) Devoted to Teacher Aide Experiences and Activities. 44

34. Summary Rating of Teacher Aide Experiences and Activities. 47

35. Realization of Objectives of Teacher Aide Program as Perceived by Teacher Aides. 48

36. Midsemester Evaluation of Teacher Aide Program by Teacher Aides. . A-1

37. Number of Elementary School Teacher Aides Who Had Certain Types of Experiences and an Assessment of These Experiences A-6

38. Number of Secondary School Teacher Aides Who Had Certain Types of Experiences and an Assessment of These Experiences A-10

39. Teacher Aides' Responses to Interview Schedule A-14

40. Responses of Cooperating Teachers to Teacher Aide Rating Form CT . A-22

41. Background Characteristics of Subjects A-25

CHAPTER I

INTRODUCTION

Problem

The education of American teachers is the focus of much current concern. Problems engendered by a rapidly changing world, the geometric increase in knowledge to be conveyed to ever increasing numbers of people, and the ever present teacher shortage, to cite but a few relevant factors, make it imperative to find quickly more effective ways of preparing teachers for their manifold roles which our society expects them to assume. Formal and informal studies of teacher education programs (Koerner, 1963; Conant, 1963), have produced several cogent recommendations worthy of consideration. A theme commonly found in these and other critical analyses is the emphasis on liberal arts as the core of the teacher's professional background. Rigorous exposure to the philosophical, psychological, and sociological foundations of the art and science of education is deemed most essential. It is generally assumed, though far from being proven, that prospective teachers are taught the basic concepts, theories, and facts offered by each foundational field and are shown how these theoretical contributions affect their personal and professional growth and the actual teaching-learning process.

Laboratory experiences, that is guided observation of children and participation in the practical activities of the classroom, are widely regarded as excellent means of demonstrating the validity of psychological principles which form the basis for the art and science of teaching (AATC, 1948; Conyers, 1955; Bradley, 1959; Trump, 1962; Mizer, 1962; Davis, 1961; Conant, 1963).

Bruce put it aptly "...for psychology will function in the education of teachers only when the practical and theoretical aspects, the specific experiences and general principles, become interrelated in the thoughtful action of students of education" (Bruce, 1952, p. 100).

Educational Psychology, a course usually required of all prospective teachers, has, rightfully, elicited much soul-searching. Some investigators (e.g., Klausmeier and Swanson, 1950; Hurst *et al.*, 1961) and committees (e.g., NSCTE 1949, 1950, 1953) have wrestled with the problem of making Educational Psychology a course which is intellectually rigorous as well as functional.

At a recent symposium sponsored by Divisions 2 and 15 of the American Psychological Association (APA, 1962), representatives from the University of Connecticut, Dickinson College, Grinnell College, University of Wisconsin, and Fairleigh Dickinson University shared their academic approaches to the teaching of the course in Educational Psychology. Two important conclusions emerged. One, experimental attempts to deal with Educational Psychology are scarce. Despite the overwhelming body of evidence derived from research on teaching (Gage, 1963) which accentuates student involvement, laboratory experiences, flexible programing, feedback, etc., most of the instructors of Educational Psychology seek refuge in the traditional lecture-recitation approach. We don't seem to practice what we preach, a fact most disturbing and disillusioning to sensitive prospective teachers (Horrocks, 1951). Two, even where experimentation has caught on, formal evaluations of the efficacy of the experimental methods are even scarcer.

The study reported here represents an experimental attempt to render educational psychology a more effective course by having students serve as teacher aides in public schools under the guidance of experienced teachers.

Related Literature

Consideration is given below to the literature concerned with these areas: (1) the current educational scene, with the emphasis being placed upon problems related to teacher preparation; (2) pre-service training of teachers, especially the role of "direct experiences"; (3) educational psychology--its objectives, content, proposals for improvement, and examples of course revisions and innovations, particular stress being placed upon experimental findings. In addition, since this study used educational psychology students as teacher aides, references will be cited of relevant studies in this area.

The Current Educational Scene

Since the advent of sputnik, American education has come under heavy criticism. Recently, books by Koerner (1963) and Conant (1963) have received wide publicity. In both of these books the training of teachers is scrutinized in harsh terms and sweeping recommendations for improvement are offered for consideration and adoption. Worthy of note is Conant's call for the improvement of practice teaching. Borrowing heavily from the experience gained in medicine, he suggests the new position of "clinical professor of education" -- a superior teacher who never abandons his own classroom and who is responsible for the supervision of student teaching. Conant regards educational psychology as one of the essential courses to be retained in teacher education and argues cogently for the introduction of laboratory experiences into all segments of teacher preparation. Obviously, those academic and professional faculties which are experimenting with new programs in teacher training will be heartened by Conant's general encouragement of diversity and new approaches in educational training.

Pre-service Training of Teachers and the Role of Directed Experiences

Conyers (1955), Trump (1962), and Mizer (1962) called for teacher preparing institutions to develop expanded programs of pre-student teaching experiences. Specific courses, related activity opportunities, and suggested scheduling are mentioned. Somewhat earlier, Zirbes (1951) stated the need, prior to student teaching, for a wider, richer array of direct experiences and the desirability of arranging many of these experiences so they are functionally related to courses. Williams, Deever, and Flynn (1960) described in positive terms a survey of fourteen teacher education institutions in Oklahoma with reference to pre-student teaching experiences starting with the second year of college and most often being part of the work in psychology, elementary and general methods. Similarly, Odland (1961) reported favorably on a student participation program designed to provide University of Minnesota juniors with the opportunity to work directly with children prior to student teaching. Carter (1958) described the School Aide program in operation at The City College, New York. However, no formal evaluation of this program has, as yet, been attempted.

Levine (1958, 1961) described a rather unique setting for direct experience for college freshmen, appropriate to the level and needs of beginning students. The locale, the school office, provided the students with experience with office routine, direction of visitors, ordering and preparation of school materials, bulletin board work, delivery of children and messages to various destinations, etc. Levine felt that in addition to a better integration of practical experiences with theory, the student was helped in ridding himself of the unrealistic preconceptions regarding teaching and the schools and to come spontaneously to a better understanding of their own future problems and responsibilities.

Educational Psychology: Objectives, Content, Proposals for Improvement

During 1949, a number of prominent educational psychologists published articles dealing with the objectives and content of educational psychology and how this course could contribute to the preparation of teachers. There was a call for agreements as to whether these courses should be conducted on a scientific-theoretical or on a technological level (NSCTE, 1949). In their deliberations, little emphasis was placed upon direct experience other than observation. Klausmeier and Swanson (1950) described the development of a functional course which had among its objectives the development of theoretical understandings of classroom problems and the ability to meet these problems. Firsthand experiences were limited to preparation of class observation reports and case studies. Their evaluation of the effectiveness of this course is positive, but stated in most general terms.

Horrocks (1951) reported a course offered at Ohio State University where there was great emphasis upon cooperative learning and a socialized type of recitation which placed considerable responsibility upon the student. Horrocks (1952) also described a course where the stress was not only upon facts and principles, but the fostering of the social and emotional adjustment of the students. Murphy (1952) presented an account of a student-centered course related to the maturity level, interests, and unique backgrounds of the students.

Cannon and Skinner (1949) described a course in educational psychology at the University of Illinois cooperatively planned by a demonstration teacher and a college instructor where an effort was made to bridge the "fissure between percept and example"; college students interacted closely and personally with high school students. Stone (1951) described a course at the Utah State Agricultural College which provided students with experiences in personal problem-solving similar to actual teaching. Baller (1952) discussed a two-semester course at the University of Nebraska where the emphasis was upon the preparation, reading and discussion of a child study record. Rivlin (1952) described the course at Queens College where many techniques are utilized, including case studies and participation with youth groups. Jensen (1957), doubtful of the efficacy of the lecture method, called for the elimination of formal classes in educational psychology in favor of laboratory experiences and student teacher programs that use the psychology professor as a resource person. His responsibility would be to assist the student in answering questions arising out of the program of direct experience.

Perhaps the more conservative opinion of Getzels (1952) would be more acceptable to many:

> ...neither theory without direct experience nor direct experience without context in theory will prepare the prospective teacher in the broad psychological understanding and competence that will be required of him in the classroom. Academic content and practical application, both within a single focus, must supplement each other in a continuous process of mutual clarification if the usefulness of each in a program of teacher preparation is to be maximized (Getzels, 1952, p. 382).

Several investigators have raised questions regarding the value of direct experiences prior to student teaching. Lynch (1954) found no significant relationship between the amount of experience with children and certain criterion measures and pointed out that unguided experiences do not necessarily produce mature and valid understandings. Horrocks (1946) saw no positive relationship between knowledge of human development and the ability to use such knowledge and was critical of the traditional instruments used for measurement of results in this area. Hurst et al. (1961) noted that the typical evaluation tools used in educational psychology are limited in their ability to guage complex outcomes. In a recent study, Hurst (1963) evaluated the relative efficiency of three methods of teaching elementary educational psychology (Decision, Discussion, and Lecture) in leading to student change in the direction of three major goals of his course: developing favorable attitudes, learning to apply knowledge, and mastery of factual material. With one exception, all three teaching methods appeared to be equally effective in leading to student change. Fulton and Rupiper (1962) compared direct versus vicarious experiences and found that the vicarious experience in one sequence yielded more favorable results and in two other sequences there was no significant difference. Darrow (1959) noted that in the case of limited participation in a laboratory school there was no advantage for the participants over non-participants, but that the participants believed the program to be beneficial. In light of these negative findings -- the overwhelming majority of published studies point in the other direction -- the earlier cautions about taking the values of direct experience for granted perhaps need reemphasis.

Teacher Aides

In the study reported here educational psychology students were used as teacher aides in order to improve the quality of their preparation for teaching. However, it is recognized that most programs of teacher aides grew out of efforts to find ways of dealing with crowded classrooms, shortage of qualified teachers, over-worked teachers, and inadequate school space. Historically, American schools had much experience with teacher assistants before 1820. Extensive use of teacher assistants was carried on in this country and elsewhere under an arrangement known as the Lancastrian or Monitorial system (Burns et al., 1956). Burns et al. pointed out that the literature directly pertinent to this topic is extremely limited in quantity. Few available reports are based on substantial research or experimentation. The literature consists largely of opinions of writers with little or limited experience with the use of teacher assistants. With this caveat in mind, some of the more significant articles dealing directly with subject of teacher aides are by Beecher (1957), Bowen (1956), Briggs (1957), Carrol (1956), Chase (1956), Hullfish (1957), Hymes (1956), McCuskey (1956), Park (1956), and Rast (1956). The articles dated 1956 refer to a symposium on the better utilization of teacher competencies which dealt specifically with the "Bay City Teacher Aide Plan." This plan involved the usage of specially trained lay persons in the classroom. Parent and teacher reactions to this plan were quite favorable and results indicated no significant difference in pupil achievement between classrooms utilizing aides and those not doing so. An interesting byproduct was that many of the aides developed an interest in full-time professional teaching and enrolled in colleges for this purpose.

Experimentation with use of teacher assistants was one of the projects of the Yale-Fairfield Study of Elementary Teaching (Burns, et al., 1956), a study designed to find ways of improving instruction in the elementary schools through the better recruitment and better preparation of teachers, and the more effective use of their talents and proficiencies. Among the most significant finding of this study was the recognition of the need for developing programs of preparation for teaching which while giving due emphasis to liberal studies identify the students from the outset with school practice and professional study thus serving the dual purpose of providing assistance for teachers and firsthand acquaintance on the part of students with techniques and problems of school procedure.

Objective

The research project was conceived as a pilot study on the use of laboratory experiences designed to render more effective the professional courses taken by students in teacher training.

The specific objective of the study was to determine the extent to which a Teacher Aide Program[1] can make Educational Psychology a more useful course.

Questions

The following questions were raised:

(1) Do students enrolled in experimental educational psychology sections learn better the psychological theories and principles relevant to teaching than do students enrolled in conventional educational psychology sections?

(2) Do students enrolled in experimental educational psychology sections increase their understanding of the many roles performed by teachers more than do students enrolled in conventional educational psychology sections?

---

[1] Henceforth abbreviated as "TAP"

(3) Do students enrolled in experimental educational psychology sections better crystallize their commitment to a teaching career than do students enrolled in conventional educational psychology sections?

Operational Definitions

Term	Definition
Score on Achievement Test in Educational Psychology and Case Studies in Teaching	Number of correct responses
Better; Increase more	Significantly higher (.05 level) gain scores
Pretest	Test given at the beginning of the spring semester 1964
Posttest	Test given at the end of the spring semester 1964
Gain score	Score on posttest minus score on pretest
Conventional educational psychology sections	Sections which comprised Control Group 2
Psychological theories and principles relevant to teaching	Items included in the Achievement Test in Educational Psychology and the Case Studies in Teaching - Forms A and B
Teacher roles	Roles included in the master list[2] of 23 roles which were derived from Redl & Wattenberg (1959), Stiles (1957), and Havighurst & Neugarten (1957)
Teacher duties and assignments in addition to classroom instruction	Duties and assignments included in the master list[2] of 19 duties and assignments which were derived from NEA, Research Division (1962)
Commitment to a teaching career	Subject's checkmark placed on a rating scale which extends from (10) "I am very certain: I will not become a teacher" through (50) "I am uncertain whether or not I will become a teacher" to (90) "I am very certain: I will become a teacher"
Crystallization of commitment to a teaching career	A shift on this scale in any direction between the pre- and posttesting.

---

[2] The lists are shown in Appendix E

CHAPTER II

METHOD

Sample

The sample consisted of 124 subjects who took a sophomore one-semester course in Educational Psychology at Fairleigh Dickinson University. All students enrolled in teacher education curricula at Fairleigh Dickinson University must take this course which follows required one-semester courses in General Psychology and either Child or Adolescent Psychology. The subjects represented a cross-section of the socio-economic groups living in the New York Metropolitan area, ranging from the lower middle to the lower upper class. In educational background and college preparation, these students also represented a cross-section of graduates from the public high schools in the same area. Table 41[1] presents background data on the subjects: age, college status, current and previous psychology courses, current and previous education courses, and teaching-related experiences prior to this experiment.

The subjects ranged in age from 18 - 27 years with the following median ages: Control Group 1 = 19; Control Group 2 = 20; Experimental Group = 19. About 50% of the subjects in each of the three treatment groups were sophomores, about 1/3 were juniors, and the remainder were seniors.

Students who were taking Educational Psychology in any other but their sophomore year were "out-of-step" with the established education curricula but this was a situation which had to be accepted.

The background of subjects in each of the three treatment groups was similar with respect to psychology or education courses previously or currently taken and with respect to teaching-related experiences which they had prior to the experiment.

Treatment

The students comprising the sample were randomly distributed into six educational psychology sections. Two instructors, the project directors, were assigned three sample sections: an experimental and two control sections.

An attempt was made to have each section consist of about 23 students. However, a number of students in certain sections indicated that they did not intend to teach (e.g., psychology majors taking the course as an elective) and these students were, therefore, not included in the sample. The distribution of subjects was as follows:

---

[1] This table is included in Appendix A.

TABLE 1

Distribution of Subjects by Instructors and Treatment Groups

Instructor	Treatment Group[a] C1	C2	E	Total
1	23	19	28	70
2	16	13	25	54
Total	39	32	53	124

[a] C1 - Control Group 1
C2 - Control Group 2
E - Experimental Group

The following treatment was given each group:

Group	Treatment
Experimental	Students were given two hours of lectures per week for 15 weeks. They served two hours per week for 14 weeks as teacher aides in classrooms of the Teaneck public schools. One hour per week for 14 weeks, students participated in seminars conducted by experienced public school teachers and discussed their teacher aide experiences.[2]
Control 1	Students were given two hours of lectures per week for 15 weeks. One hour per week for 14 weeks students participated in small group discussions led by their college instructors.
Control 2	Students were given three hours of lectures per week for 15 weeks.

---

[2] Teacher aide experiences are considered to encompass the following items: (1) observation of children and of activities inside and outside the classroom; (2) teaching (in front of class, part of a class, or tutoring individual children); (3) examining instructional materials, records, equipment; (4) activities related to teaching (e.g., preparing and correcting tests, correcting homework, operating equipment); (5) conferences and discussions with cooperating teachers, school administrators, and specialists).

The order of treatment was randomly latinized for the two instructors. The lecture topics and the order of their presentation was the same for all six sections. All students used the same text and were assigned the same readings in the text as well as in supplementary sources.[3]

The rationale for this design was to control, as much as was possible, two major sources of variation: teacher personality and the "Hawthorne effect." To control for the possible effect of different "teaching styles," each of the two participating instructors taught all three treatment sections. The one-hour weekly small group discussions attended by students in Control Sections 1 were assumed to represent the "special" treatment which was different from the traditional treatment accorded to students in Control Sections 2.

Research Instruments

All research instruments were developed by the investigators for special use in this project. A description of these instruments follows.[4]

Achievement Test in Educational Psychology

The test was designed to assess students' knowledge of psychological theories, concepts, and principles relevant to teaching. The four-option, 100 item multiple choice test sampled the content of the six basic units comprising the educational psychology course. The number of items included for each unit was proportional to the emphasis placed on each unit. The same test served as a pretest as well as a posttest. Odd-even reliability of the pretest was found to be $r = .79$ $(N = 124)$, $p < .001$; of the posttest it was $r = .87$ $(N = 124)$, $p < .001$.

Case Studies in Teaching: Forms A and B

These tests[5] attempted to determine students' ability to apply their knowledge of psychological theories, concepts, and principles to concrete school situations. Each case study was written to depict a common teaching situation or a school incident. Form A, used as the pretest, includes 20 cases; Form B, used as the posttest, consists of 25 cases. A list of 25 basic principles of Educational Psychology was compiled from these sources: Lindgren (1962), Cronbach (1963), Blair, Jones, and Simpson (1963), and Symonds (1961). Students were required to match each case with a relevant psychological principle best illustrated by that case.

---

[3] A copy of the course syllabus is included in Appendix D.

[4] Specimen of all research instruments are included in Appendix B.

[5] Mr. Richard S. Klein, a graduate in Psychology at Fairleigh Dickinson University, assisted the project directors in developing this test.

The unanimous judgment of three educational psychologists determined the correctness of the student's response, i.e., the correct matching of case with psychological principle. The same list of principles was used with Forms A and B of the Case Studies in Teaching.

In order to develop the Case Studies in Teaching - Form A, a pool of 35 items were written and pretested on 10 senior college students in teacher education who had taken at least three psychology courses, including Educational Psychology. It was not feasible to use a group comparable to the project's subjects for this initial tryout. Items which appeared to be too easy and too difficult were eliminated. Case studies which the tryout subjects felt to be worded ambiguously were rewritten. From the pool of 35 items, 20 useable case studies emerged.

A pool of 50 cases were written of which 25 were included in Form B. These 50 case studies were administered as a tryout to 37 students taking Educational Psychology (not project subjects) at a distant campus of Fairleigh Dickinson University. Those cases (25) which appeared to be too easy, too difficult, and too ambiguous were eliminated.

Reliability coefficients, based on internal consistency, were found to be as follows: Form A: $r = 0.54$ ($N = 124$), $p < .01$; Form B: $r = 0.48$ ($N = 124$), $p < .01$.

Student Questionnaire: Forms A and B

The questionnaires were developed to gather the following kinds of data:

(1) Biographical and demographic background data (Form A only);
(2) Description of teacher roles, duties, and assignments (Forms A and B);
(3) Rating of certainty of choice to become a teacher (Forms A and B);
(4) Ideal vs. Realistic preferences for a teaching or non-teaching career;
(5) Scale of Motives for Teaching (Forms A and B) (Lang, 1958).

Interview Schedule

This schedule was developed for use in interviews with all Teacher Aides which took place at the end of the Teacher Aide Program. Areas covered in this schedule include the following:

(1) Experiences which teacher aides have had and their evaluation of these experiences;
(2) An estimate of time devoted to certain types of experiences;
(3) A summary rating of all teacher aide experiences;
(4) Comments with respect to the seminars;
(5) Ratings on the extent to which the Teacher Aide Program has realized its three-fold objectives;
(6) Criticisms of the Teacher Aide Program and suggestions for its improvement.

Rating Forms and Reactionnaires

Several forms were developed in order to assess the operation of the Teacher Aide Program at midsemester, to give feedback to the participants - teacher aides, cooperating teachers, seminar leaders, FDU instructors - and to gather information which could be used to suggest means of improving subsequent programs.

The primary purpose of the Teacher Aide Rating Forms was to gather evaluations of the students by two independent professionals which could be used for counseling and advising students. For instance, cooperating teachers and seminar leaders rated the students' potential for becoming a good teacher. Listed below are the forms which were used:

(1) Mid-semester Evaluation of Program by Teacher Aides;
(2) Teacher Aide Rating Form CT (used by cooperating teachers);
(3) Teacher Aide Rating Form SL-M and SL-E (used by seminar leaders);
(4) Seminar Reactionnaire Forms SL-M and SL-E (used by seminar leaders).

Other Forms

Two guides were composed: (1) Guide for Cooperating Teachers, and (2) Guide for Teacher Aides. These guides spelled out the objectives of the program, enumerated experiences which the project directors felt would be appropriate and desirable for students to have, and listed certain administrative procedures governing the program.

Procedure

Project #S-028 was divided into three operational phases: (1) Preliminary Planning Stage, (2) Experimental Stage, and (3) Data Analysis and Concluding Stage.

Preliminary Planning Stage

During the Preliminary Planning Stage, the investigators developed and pretested the research instruments which were used as pretests, recruited and trained personnel, and made all provisions for implementing the research design for the study.

With the cooperation of Dr. Maurie Hillson, Professor of Education, Fairleigh Dickinson University, and Mr. M. Ray Kelly, Curriculum Coordinator, Teaneck Elementary Schools, 30 cooperating teachers (19 elementary, 11 secondary) and 7 seminar leaders (5 elementary, 2 secondary) were selected from the Teaneck Public School System. Teacher aides were placed in three Teaneck Elementary Schools, one Teaneck Junior High School, and one Teaneck Senior High School.

Office space and equipment was made available by Marinus G. Galanti, Dean, Teaneck Campus, Fairleigh Dickinson University.

An orientation conference was held with all cooperating teachers in order to discuss with them the Teacher Aide Program, their functions, and the responsibilities of students who were to be placed with them. The Guide for Cooperating Teachers was handed out to them and its content was discussed. The seminar leaders were also present at this conference.

The investigators also held a preliminary orientation session with the seminar leaders. Each leader was given a copy of the text (Lindgren, 1962) used in the educational psychology course and the course syllabus. This briefing session dealt with the nature of the program, the role of the seminar leader, and the responsibilities of the teacher aides. The purpose of the seminars was as follows: (1) to enable students to discuss and share their teacher aide experiences and (2) to help students integrate the theoretical knowledge acquired in the college classroom lectures with their practical experience in the school classrooms.

Conferences were held with the project consultants, Dr. Robert L. Thorndike, Dr. Amedeo G. Sferra, and Dr. Maurie Hillson, with Dr. John L. O'Neill, Dean, College of Education, and with Dr. Harvey Scribner, Superintendent of the Teaneck Public Schools.

The Preliminary Planning Stage for Project #S-028 had been completed by January 29th, 1964, and on that date the study moved into the Experimental Stage.

Experimental Stage

The experimental stage encompassed the period from January 29th, 1964, to May 22nd, 1964, the duration of the spring semester at Fairleigh Dickinson University.

During the first week of class the following activities took place:

(1) Briefing sessions were held with all teacher aides at which time the Guide for Teacher Aides was handed out and its content discussed. Students were also provided with notebooks for the recording of all observations, experiences, and questions to be raised in the seminars.

(2) Teacher aides were assigned to their cooperating teachers, two aides per teacher at the elementary level, one or two aides per teacher at the secondary level. Student preferences for a particular grade level and subject were taken into consideration.

(3) The battery of pretests was administered to all subjects as well as to an auxiliary group of 26 students taught by Mr. Gerald Robbins, an instructor at the Rutherford Campus.[6] This battery included the: (a) Achievement Test in Educational Psychology, (b) Case Studies in Teaching - Form A, and (c) Student Questionnaire - Form A.

---

[6] Student data of Instructor Robbins are reported in Appendix F.

The Project Co-director visited all schools and conferred with cooperating teachers during the third week of the program.

The investigators developed and pretested the research instruments which were to be used as posttests and constructed the rating forms and reactionnaires.

At the mid-semester period of the program, the teacher aides turned in their Mid-semester Evaluation of Program form, the cooperating teachers filled out the Teacher Aide Rating Form CT, and the seminar leaders completed Teacher Aide Rating Form SL-M and the Seminar Reactionnaire Form SL-M. The information contained in these forms helped the investigators to check on the progress of the various segments of the program - the teacher aide experiences, the seminars, and the college classroom lectures - and to modify aspects of the program. For instance, when it was discovered that a few students did not have certain teacher aide experiences, the Project Co-director contacted the cooperating teachers and arranged for these students to be exposed to more varied experiences. Also, it was possible to detect distortions in students' perceptions of their teacher aide role and to attempt to correct these.

Common themes contained in the various forms mentioned above were abstracted and discussed with the cooperating teachers and seminar leaders at a mid-semester evaluation and review meeting attended by most of the project personnel. This meeting served two purposes: (1) to allow for reciprocal feedback of impressions, criticisms, and suggestions between cooperating teachers, seminar leaders, and college instructors, and (2) to encourage the participants to improve their part of the program if comments indicated that this was needed and if circumstances allowed it.

Weekly informal conferences were held with all seminar leaders.

During the last week of the program, the Project Co-director interviewed all cooperating teachers, using the Teacher Aide Rating Form - CT as his guide. Comments offered by teachers were recorded on this form.

During the last week of classes the following activities took place:

(1) Seminar leaders filled out the Seminar Reactionnaire Form SL-E and the Teacher Aide Rating Form SL-E;

(2) Teacher Aides completed the Interview Schedule;

(3) Interviews were conducted with all teacher aides guided by the Interview Schedule. These interviews focused on students' evaluations of their experiences in the Teaneck schools and in the seminars and also elicited suggestions for improving subsequent teacher aide programs. The data gathered in the Teacher Aide Rating Forms which were filled out by the cooperating teachers and the seminar leaders were interpreted to the students. For instance, the students received feedback with respect to their strengths and weaknesses as perceived independently by two professionals. Thus, these interviews also served, in many instances, as counseling sessions.

(4) The battery of posttests was administered to all subjects as well as to an auxiliary group of 26 students taught by Mr. Gerald Robbins, an instructor at the Rutherford campus.[7] This battery included the: (a) Achievement Test in Educational Psychology, (b) Case Studies in Teaching - Form B, and (c) Student Questionnaire - Form B.

On May 22nd, 1964, the Experimental Stage was completed and the Data Processing and Concluding Stage began.

Data Analysis and Concluding Stage

Students' scores on the Case Studies in Teaching - Forms A and B were converted to z-scores in order to make the scores comparable and amenable to gain score treatment.

Subjects' listings of teacher roles, duties and assignments in the Student Questionnaires - Forms A and B were compared with master lists (see Operational Definitions, p. 6). Two judges independently scored each student's responses. In cases of disagreement, a third judge resolved the discrepancy.

In order to answer questions #1, #2, and #3 (see pp. 5 and 6), gain scores were computed on the Achievement Tests in Educational Psychology. Case Studies in Teaching, number of teacher roles and duties correctly listed, and ratings on the scale: Certainty of Decision to Teach. The gain scores were subjected to analyses of variance via standard statistical procedures. In cases of unequal cells, Snedecor's harmonic mean adjustment was used.

All correlations which were performed are Pearson's Product-moment correlations.

For certain auxiliary analyses, Chi Square tests and t- tests were applied, where appropriate.

The 25 reasons comprising the Scale of Motives for Teaching were subjected to a factor analysis via the centroid method of extraction and the varimax method of rotation. Seven factor scores were computed for each subject based on the pretest and posttest data. Gains in factor scores were computed and treated by analysis of variance.

In all comparisons, the .05 level was adopted as the criterion of significance.

Project #S-028 was completed with the evaluation and interpretation of all relevant data.

---

[7] Student data of Instructor Robbins are included in Appendix F.

CHAPTER III

RESULTS AND CONCLUSIONS

It was the purpose of this study to determine the extent to which a Teacher Aide Program can make Educational Psychology a more useful course. The objective of this course were:

(1) To survey and critically analyze current psychological theories and principles relevant to teaching;

(2) To increase students' understanding of the many roles performed by teachers;

(3) To help students crystallize their commitment to a teaching career.

Thus, the primary concern was whether a Teacher Aide Program can facilitate the realization of these objectives.

Chapter III presents the results of findings pertinent to the three basic questions posed by the study, as well as the outcome of certain auxiliary analyses.

A preliminary concern was whether the three treatment groups were equivalent with respect to the pretest measures used. Table 2 presents means and standard deviations of subjects' scores on the pretests.

TABLE 2

Means and Standard Deviations of Scores on Pretests

Pretest[a]	C1 (N = 39) Mean	C1 (N = 39) S.D.	C2 (N = 32) Mean	C2 (N = 32) S.D.	E (N = 53) Mean	E (N = 53) S.D.
Achievement Test in Ed. Psych.	63.90	9.16	61.78	9.25	63.91	7.22
Case Studies in Teaching - Form A	16.23	2.01	15.06	2.77	15.36	2.71
Student Questionnaire - Form A						
Teacher Roles	3.36	1.21	4.12	1.80	3.79	1.29
Teacher Duties	3.10	1.48	3.78	1.87	3.62	1.56
Certainty of Decision to Teach	76.77	14.85	76.81	14.69	81.07	9.70

[a] All scores are raw scores.

The analysis of variance (Tables 3 and 4) showed that the three treatment groups did not differ significantly in their performance on the Achievement Test in Educational Psychology and on the Case Studies in Teaching - Form A. Nor did these groups differ significantly with respect to their ability to list correctly roles played by teachers and to enumerate duties and assignments which teachers have in addition to classroom instruction (Tables 5 and 6). Furthermore, no significant differences emerged with regard to students' commitment to a teaching career (Table 7). Thus, the treatment groups were initially equivalent.

TABLE 3

Analysis of Variance of Scores on Achievement Test in Educational Psychology Used as Pretest

Source of Variation	Sum of Squares	d.f.	Mean Square	F	P
Between Groups	106	2	53.0	0.73	> .05
Within Groups	8771	121	72.5		
Total	8877	123			

TABLE 4

Analysis of Variance of Scores on Case Studies in Teaching - Form A Used as Pretest

Source of Variation	Sum of Squares	d.f.	Mean Square	F	P
Between Groups	37	2	18.5	2.67	> .05
Within Groups	839	121	6.9		
Total	876	123			

TABLE 5

Analysis of Variance of Number of Teacher Roles Correctly Listed in Student Questionnaire - Form A Used as Pretest

Source of Variation	Sum of Squares	d.f.	Mean Square	F	P
Between Groups	10	2	5.0	2.5	> .05
Within Groups	250	121	2.0		
Total	260	123			

TABLE 6

Analysis of Variance of Number of Teacher Duties Correctly Listed in Student Questionnaire - Form A Used as Pretest

Source of Variation	Sum of Squares	d.f.	Mean Square	F	P
Between Groups	8	2	4.0	1.5	> .05
Within Groups	327	121	2.7		
Total	335	123			

TABLE 7

Analysis of Variance of Scale Ratings on Certainty of Decision to Teach Recorded in Student Questionnaire - Form A Used as Pretest

Source of Variation	Sum of Squares	d.f.	Mean Square	F	P
Between Groups	694	2	347.0	1.89	> .05
Within Groups	22233	121	183.7		
Total	22927	123			

Question No. 1

The following question was posed:

> Do students enrolled in experimental educational psychology sections learn better the psychological theories and principles relevant to teaching than do students enrolled in conventional educational psychology sections?

In order to answer this question, the treatment groups were compared with respect to gain scores earned by the students on two criterion tests, the Achievement Tests in Educational Psychology[1] and the Case Studies in Teaching Tests[2]. Data pertinent to this question are embodied in Tables 8, 10, and 12 which deal with the ATEP, and in Tables 9, 11, and 13 which deal with the CST.

Statistically significant mean gains were earned by subjects in all treatment groups on the ATEP (Table 10) but not on the CST (Table 11). The analysis of variance of gain scores performed on both criterion tests resulted in non-significant F ratios for treatment, instructor, and treatment x instructor interaction (Tables 12 and 13).

The ATEP (pretest) and CST - Form A correlated 0.40 ($p < .001$; $N = 124$); ATEP (posttest) and CST - Form B correlated 0.47 ($p < .001$; $N = 124$). These findings suggest that these two criterion tests measure content areas in Educational Psychology which are only moderately related.

In view of these results, it may be concluded that students enrolled in experimental educational psychology sections did not learn better the psychological theories and principles relevant to teaching than did students enrolled in conventional educational psychology sections, where "better" is defined as significant differences between groups in mean gain scores on both criterion tests.

---

[1] Henceforth abbreviated as "ATEP"
[2] Henceforth abbreviated as "CST"

TABLE 8

Means and Standard Deviations of Gain Scores on Achievement Tests in Educational Psychology by Instructors and Treatment Groups

		N	Mean	S.D.
Instructor 1	C1	23	14.30	8.03
	C2	19	11.89	5.84
	E	28	10.93	6.34
Instructor 2	C1	16	12.38	6.68
	C2	13	11.46	4.38
	E	25	10.68	6.28
Treatment Group	C1	39	13.51	7.71
	C2	32	11.72	5.30
	E	53	10.81	6.41
Instructor	1	70	12.30	6.98
	2	54	11.37	6.07
Total		124	11.90	6.60

TABLE 9

Means and Standard Deviations of Gain Scores on Case Studies in Teaching by Instructors and Treatment Groups

		N	Mean	S.D.
Instructor 1	C1	23	-0.480	1.291
	C2	19	0.565	1.460
	E	28	-0.020	0.964
Instructor 2	C1	16	-0.048	1.180
	C2	13	0.181	0.947
	E	25	-0.024	0.819
Treatment Group	C1	39	-0.303	1.319
	C2	32	0.409	1.335
	E	53	-0.022	0.904
Instructor	1	70	-0.012	1.291
	2	54	0.018	0.739
Total		124	0.0010	1.16

TABLE 10

Tests of Significance of Mean Gain Scores on Achievement Tests in Educational Psychology

	Control 1	Control 2	Experimental
N	39	32	53
Mean	13.51	11.72	10.81
S.D.	7.71	5.30	6.41
t	10.81	12.21	12.15
P	$< .001$	$< .001$	$< .001$

TABLE 11

Tests of Significance of Mean Gain Scores[a] on Case Studies in Teaching

	Control 1	Control 2	Experimental
N	39	32	53
Mean	-0.303	0.409	-0.022
S.D.	1.319	1.335	0.904
t	-1.52	1.64	-0.16
P	$> .05$	$> .05$	$> .05$

[a] z-scores

TABLE 12

Analysis of Variance of Gain Scores on
Achievement Tests in Educational Psychology
(Instructors x Treatment)

Source of Variation	Sum of Squares	d.f.	Mean Square	F	P
Instructor	21.51	1	21.51	0.49	>.05
Treatment	126.99	2	63.49	1.44	>.05
Interaction: Instructor x Treatment	16.66	2	8.33	0.19	>.05
Subjects (within)	5206.94	118	44.13		
Total	5409.64	123			

TABLE 13

Analysis of Variance of Gain Scores on
Case Studies in Teaching
(Instructors x Treatment)

Source of Variation	Sum of Squares	d.f.	Mean Square	F	P
Instructor	0.00061	1	0.00061	0.004	>.05
Treatment	0.79678	2	0.39839	3.019	>.05
Interaction: Instructor x Treatment	0.32131	2	0.16065	1.22	>.05
Subjects (within)	15.56621	118	0.13192		
Total	16.75092	123			

Question No. 2

Question No. 2 asked the following:

> Do students enrolled in experimental educational psychology sections increase their understanding of the many roles performed by teachers more than do students enrolled in conventional educational psychology sections?

In both forms of the Student Questionnaire, subjects were asked to list: (1) teachers' roles and (2) duties and assignments which teachers have in addition to classroom instruction. The number of roles, duties, and assignments correctly listed constituted the student's score. The treatment groups were compared with respect to gain scores earned by the students on these two items of the Student Questionnaire. Data relevant to the question posed above are presented in Tables 14, 16, and 18 which deal with teacher roles, and in Tables 15, 17, and 19 which deal with teacher duties and assignments other than classroom instruction.

Slight, though statistically significant mean gains were obtained by students in groups C1 and E on their listings of teacher roles (Table 16) as well as of teacher duties and assignments (Table 17). The analysis of variance of gain scores performed on teacher roles yielded a significant $\underline{F}$ ratio for treatment (Table 18). $\underline{F}$ ratios for instructor and treatment x instructor interaction were non-significant. Comparisons of the mean gains earned by students in group E with those in groups C1 and C2 resulted in significant $\underline{t}$ ratios, 2.3 and 2.7 respectively. The mean gain on the listing of teacher roles of the group E students was significantly greater than that of group C1 and C2 students. The analysis of variance of gain scores computed for teacher duties and assignments yielded non-significant $\underline{F}$ ratios for treatment, instructor, and treatment x instructor interaction (Table 19).

It may be concluded that students enrolled in experimental psychology sections did demonstrate a greater understanding of the many roles performed by teachers than did students enrolled in conventional educational psychology sections. However, compared to students in groups C1 and C2, students in group E did not significantly increase their understanding of the many duties and assignments which teachers have in addition to classroom instruction.

A qualitative analysis of the students' listings of teacher roles and duties on the pretest indicated that:

(1) the treatment groups did not differ significantly with regard to the kinds of roles and duties enumerated;

(2) the roles of "confidante," "director of learning," and "group leader" were enumerated most frequently by all treatment groups;

(3) the roles of "detective," "idol," "colleague," "member of a profession" were not cited by any subject;

(4) "preparing teaching materials," "counseling," and "sponsoring pupil organizations" were teacher duties listed most frequently by students in the three groupings;

TABLE 14

Means and Standard Deviations of Gain Scores on Number of Teacher Roles Correctly Listed by Instructors and Treatment Groups

		N	Mean	S.D.
Instructor 1	C1	23	1.00	1.28
	C2	19	0.53	1.70
	E	28	1.71	1.41
Instructor 2	C1	16	0.94	1.09
	C2	13	1.15	2.63
	E	25	1.92	1.79
Treatment Group	C1	39	0.98	1.25
	C2	32	0.78	2.16
	E	53	1.81	1.80
Instructor	1	70	1.16	1.54
	2	54	1.44	1.92
Total		124	1.28	2.96

TABLE 15

Means and Standard Deviations of Gain Scores on Number of Teacher Duties Correctly Listed by Instructors and Treatment Groups

		N	Mean	S.D.
Instructor 1	C1	23	0.78	1.47
	C2	19	-0.10	1.83
	E	28	1.39	1.99
Instructor 2	C1	16	0.69	1.21
	C2	13	0.92	1.49
	E	25	0.92	2.24
Treatment Group	C1	39	0.74	1.37
	C2	32	0.31	1.81
	E	53	1.17	2.18
Instructor	1	70	0.79	1.89
	2	54	0.85	1.82
Total.		124	0.82	1.86

TABLE 16

Tests of Significance of Mean Gain Scores on Number of Teacher Roles Correctly Listed in Student Questionnaires

	Control 1	Control 2	Experimental
N	39	32	53
Mean	0.98	0.78	1.81
S.D.	1.25	2.16	1.80
t	4.90	2.00	7.30
P	< .001	> .05	< .001

TABLE 17

Tests of Significance of Mean Gain Scores on Number of Teacher Duties Correctly Listed in Student Questionnaires

	Control 1	Control 2	Experimental
N	39	32	53
Mean	0.74	0.31	1.17
S.D.	1.37	1.81	2.18
t	3.22	0.91	3.90
P	<.01	>.05	<.001

TABLE 18

Analysis of Variance of Gain Scores on Number of Teacher Roles Correctly Listed in Student Questionnaires (Instructors x Treatment)

Source of Variation	Sum of Squares	d.f.	Mean Square	F	P
Instructor	1.39	1	1.39	0.48	$> .05$
Treatment	20.82	2	10.41	3.64	$< .05$
Interaction: Instructor x Treatment	2.08	2	1.04	0.36	$> .05$
Subjects (within)	336.92	118	2.86		
Total	367.12	123			

TABLE 19

Analysis of Variance of Gain Scores on Number of Teacher Duties Correctly Listed in Student Questionnaires (Instructors x Treatment)

Source of Variation	Sum of Squares	d.f.	Mean Square	F	P
Instructor	—	1	--	--	--
Treatment	10.41	2	5.20	1.52	$> .05$
Interaction: Instructor x Treatment	10.41	2	5.20	1.52	$> .05$
Subjects (within)	402.58	118	3.41		
Total	428.73	123			

(5) all of the 19 teacher duties and assignments included in the master list were mentioned by at least one student.

An inspection of the kinds of teacher roles and duties which were enumerated by the students on the posttest suggested that:

(1) a significantly greater proportion of students in group E mentioned the role of "disciplinarian" and cited teachers' "monitorial functions" than did the students in either of the two control groups;

(2) with this exception, the students comprising the three treatment groups listed, proportionately, the same types of roles and duties;

(3) all of the 23 teacher roles included in the master list were mentioned, particularly "confidante," "director of learning" and "disciplinarian," and "group leader";

(4) all of the 19 teacher duties and assignments were cited by at least one student;

(5) "counseling," "preparing teaching materials," "preparing, administering, and correcting tests" were the teacher duties recorded most frequently by all students.

The qualitative analysis suggested that the three treatment groups had, generally, similar perceptions of the specific roles teachers play as well as of duties and assignments they have in addition to classroom instruction.

Question No. 3

The third question raised was:

> Do students enrolled in experimental educational psychology sections better crystallize their commitment to a teaching career than do students enrolled in conventional educational psychology sections?

In both forms of the Student Questionnaire, subjects were asked to place a checkmark on a scale[3] which reflected the degree of certainty of their decision to become a teacher. Data pertaining to their shifts in scale ratings are reported in Tables 20-22. The mean changes of all treatment groups were subjected to an analysis of variance which resulted in non-significant F-ratios for treatment, instructor, and treatment x instructors interaction (Table 22).

Thus, it may be concluded that students enrolled in experimental educational psychology sections did not better crystallize their commitment to a teaching career than did students enrolled in conventional educational psychology sections.

---

[3] The scale ranges from (10) "I am very certain: I will not become a teacher" through (50) "I am uncertain whether or not I will become a teacher" to (90) "I am very certain: I will become a teacher."

TABLE 20

Means and Standard Deviations of Changes in Scale Ratings on Certainty of Decision to Teach by Instructors and Treatment Groups

		N	Mean	S.D.
Instructor 1	C1	23	4.39	7.98
	C2	19	3.26	11.18
	E	28	-2.75	10.71
Instructor 2	C1	16	-1.31	13.80
	C2	13	-0.08	8.15
	E	25	-1.36	10.73
Treatment Group	C1	39	2.05	11.26
	C2	32	1.90	12.10
	E	53	-2.09	11.05
Instructor	1	70	1.23	10.58
	2	54	-1.04	11.30
Total		124	0.24	10.96

TABLE 21

Tests of Significance of Mean Changes in Scale Ratings on Certainty of Decision to Teach Recorded in Student Questionnaires

	Control 1	Control 2	Experimental
N	39	32	53
Mean	2.05	1.90	-2.09
S.D.	11.26	12.10	11.05
t	1.13	0.86	-1.37
P	$>.05$	$>.05$	$>.05$

TABLE 22

Analysis of Variance of Mean Changes in Scale Ratings on Certainty of Decision to Teach Recorded in Student Questionnaires (Instructors x Treatment)

Source of Variation	Sum of Squares	d.f.	Mean Square	F	P
Instructor	186.68	1	186.68	1.59	$>.05$
Treatment	335.19	2	167.59	1.43	$>.05$
Interaction: Instructor x Treatment	251.22	2	125.61	1.07	$>.05$
Subjects (within)	13844.54	118	117.33		
Total	14768.74	123			

Results will now be presented relating to the outcomes of certain auxiliary analyses. These include:

(1) A comparison of the treatment groups with respect to:

  (a) "ideal" vs. "realistic" preferences for a teaching or non-teaching career;

  (b) changes, if any, in their choice of teaching level and/or subject;

  (c) changes, if any, in their ratings of reasons regarded as influential in their choice of teaching;

(2) A comparison of ratings made by cooperating teachers and seminar leaders of the teacher aides' potential for becoming good teachers;

(3) An analysis of comments, reactions, criticisms, and suggestions regarding the Teacher Aide Program offered by: (a) teacher aides, (b) cooperating teachers, and (c) seminar leaders.

Ideal Vs. Realistic Preferences for a Teaching or Non-teaching Career

In the Student Questionnaire - Forms A and B, students were asked to list the profession which, immediately upon graduation, they (a) ideally would like to have and (b) might realistically expect to secure. Interest focused on the question whether differences, if any, existed between the treatment groups prior to and after the Teacher Aide Program with regard to their "ideal" and "realistic" choices of a teaching career.

For the analysis only first choices were used. Students' responses were dichotomized into "teaching" and "non-teaching." Thus, four combinations of responses were obtainable:

Combination (Category)	"Ideal" occupational choice	vs.	"Realistic" occupational choice
1	teaching		teaching
2	teaching		non-teaching
3	non-teaching		teaching
4	non-teaching		non-teaching

Students' occupational preferences recorded at the pretesting (Form A) are shown in Table 23 and at the posttesting (Form B) in Table 24. It can be seen that, even though all subjects were enrolled in a program of teacher education, 35 (28%) of them on the pretest and 27 (22%) of them on the posttest would "ideally" not select teaching as their career.

TABLE 23

Ideal Vs. Realistic Preferences for
Teaching or Non-teaching Careers (Pretest)

Treatment Group	Career Preference Combination				
	1	2	3	4	Total
C1	26	1	6	6	39
C2	25	0	4	3	32
E	34	3	15	1	53
Total	85	4	25	10	124

TABLE 24

Ideal Vs. Realistic Preferences for
Teaching or Non-teaching Careers (Posttest)

Treatment Group	Career Preference Combination				
	1	2	3	4	Total
C1	27	0	9	3	39
C2	28	2	1	1	32
E	39	1	8	5	53
Total	94	3	18	9	124

Chi Squares were computed in order to compare the response pattern of the three treatment groups prior to and after the experiment. Categories 1 and 2 (ideal occupational choice = teaching) and categories 3 and 4 (ideal occupational choice = non-teaching) were combined because of the paucity of cases in categories 2 and 4. The results of these analyses are presented in Tables 25 and 26.

Out of 124 students, only 8 students shifted from non-teaching to teaching in denoting their "ideal" occupational choice (Tables 25 and 26). The treatment groups did not differ significantly prior to the program with respect to their response pattern (Chi Square = 0.861, $p > .05$; Table 25). However, they did differ significantly after the program (Chi Square = 6.62; $p < .05$; Table 26). At the posttesting, fewer (than expected) of the C1 students, and more (than expected) of the C2 students indicated that teaching was their "ideal" choice. For the students in group E, the observed and expected frequencies were essentially the same.

It may be inferred that the experiences of the Teacher Aide Program did not significantly alter teacher aides' preferences for teaching as the "ideal" or "realistic" career.

TABLE 25

Chi Square Analysis of Ideal Vs. Realistic Preferences for Teaching or Non-teaching Careers (Pretest)

Treatment Group	Career Preference Combination 1 + 2[a]	3 + 4[b]	Total	
C1	27	12	39	
C2	25	7	32	Chi Square = 0.86
E	37	16	53	$p > .05$
Total	89	35	124	

[a]Teaching is ideal choice
[b]Non-teaching is ideal choice

TABLE 26

Chi Square Analysis of Ideal Vs. Realistic Preferences for Teaching or Non-teaching Careers (Posttest)

Treatment Group	Career Preference Combination 1 + 2[a]	3 + 4[b]	Total	
C1	27	12	39	
C2	30	2	32	Chi Square = 6.62
E	40	13	53	$p < .05$
Total	97	27	124	

[a]Teaching is ideal choice
[b]Non-teaching is ideal choice

Stability of Choice of Teaching Level and/or Subject

It was possible to note whether students indicated the same choice of teaching level and/or subject on the Student Questionnaire - Form B as they had done previously on Form A or whether they had changed during the experiment.

Table 27 shows the relevant data.

TABLE 27

Similarity and Difference of Choice of Teaching Level and/or Subject Based on Responses to Student Questionnaires

Treatment Group	Choice of Teaching Level and/or Subject			
	Same[a]	Different	Total	
C1	39	0	39	
C2	31	1	32	Chi Square = 7.63
E	46	7	53	$p < .05$
Total	116	8	124	

[a]The students indicated the same choice on both forms of the Student Questionnaire, i.e., before and after the Teacher Aide Program.

Only eight students indicated a different choice of level and/or subject on the Student Questionnaire - Form B. The analysis of the preference pattern showed (Chi Square = 7.63; $p < .05$; Table 27) that a significant number of students in group E shifted away from their original choice. Interviews with the teacher aides suggested that these shifts can be directly attributed to their firsthand experience in the schools.

Motives for Teaching

Subjects were also asked to complete the Scale of Motives for Teaching (Lang, 1958) which was included in the two forms of Student Questionnaire. Confronted with a list of 25 representative reasons why people may choose the teaching profession, students had to select three most, three least, five much, and five slightly influential reasons. The remaining nine reasons were to be regarded as about half/half influential.

The students in the three treatment groups did not differ significantly with respect to their initial rating of these 25 reasons. Three reasons which were checked as most influential were: "I like working with children" (69%), "Teaching gives me a feeling of accomplishment" (58%), and "I like the continuous opportunity to learn" (30%). The three least influential reasons were: "Teaching offers me an avenue of escape from the harsh realities of life" (77%), "Teaching allows me to express hostility without too much criticism" (71%), and "Teaching offers me a continuous opportunity to relive periods of my childhood" (43%). Student responses to all 25 reasons are shown in Table 28.

Since the scale was administered before and after the TAP, changes, if any, could be noted in the ratings of these reasons by students comprising the three treatment groups. Instead of undertaking 25 analyses of variance, the 25 reasons were subjected to a factor analysis via the centroid method of extraction and the varimax method of rotation. The loadings of the seven factors which emerged and their description are listed in Tables 29 and 30.

Seven factor scores were computed for each subject based on the pre- and posttest data. Gains in factor scores were obtained. The analyses of variance of gains in these seven factor scores resulted in non-significant F ratios for treatment, instructor, and treatment x instructor interaction.

Thus it may be concluded that the subjects comprising the three treatment groups did not differ significantly in their ratings of reasons regarded as influential for selecting a teaching career before and after the TAP. It may be inferred that the experiences of the TAP did not significantly change teacher aides' ratings of reasons regarded as influential for choosing the teaching profession.

Ratings by Cooperating Teachers and Seminar Leaders of Teacher Aides' Potential for Becoming Good Teachers

Cooperating teachers and seminar leaders were asked, at the conclusion of the program, to indicate on their respective teacher aide rating forms whether they felt that the student would make a good teacher. Their ratings are shown in Table 31.

The cooperating teachers felt that about 74% of the aides represented good prospects and reserved judgment on 26%, whereas the seminar leaders endorsed 83% of the aides and were not sure with respect to 9%.

The ratings of teacher and seminar leaders corresponded rather closely. For 26% of the aides they demonstrated close agreement, for about 38% perfect agreement (Table 32).

The impressions given by these Teaneck school teachers suggest that the aides were well received by them. It is important to know that when an institution sends its students in teacher training into the schools that they, generally, are well regarded and thus reflect favorably upon their institution.

TABLE 28

Percentage of Responses on The Scale of Motives for Teaching
Recorded in Student Questionnaire - Form A
(N = 124)

REASON	RESPONSE CATEGORY				
	Least	Slightly	Half/half	Much	Most
1. I like to work in clean and pleasant surroundings	5.6	18.5	58.9	14.5	2.4
2. Teaching offers job security	1.6	8.1	40.3	29.8	20.2
3. I enjoy the intellectual fellowship of other teachers	3.2	14.5	51.6	28.2	1.6
4. I like to be in a position of authority	8.1	42.7	41.1	5.6	1.6
5. I like working with children	0.0	2.4	8.1	19.4	69.4
6. Teaching is relatively easy work	17.7	49.2	29.2	3.2	0.8
7. I like being with people	0.8	6.5	34.7	46.0	11.3
8. Teaching offers attractive salaries	7.3	23.4	54.0	12.9	1.6
9. Teaching gives me a feeling of accomplishment	0.0	0.0	14.5	26.6	58.1
10. Teaching may correct some of the shortcomings of my past	32.3	41.9	17.7	6.5	0.0
11. Teaching is less competitive than other professions	5.6	42.7	48.4	3.2	0.0
12. I like to render service to society	0.8	12.1	39.5	35.5	11.3
13. I like a job which is not monotonous	1.6	10.5	38.7	37.9	11.3
14. Teaching is a convenient job for a woman (or a man)	1.6	18.5	53.2	16.1	10.5
15. I like the school-room atmosphere and want to stay in it	4.0	28.2	46.8	16.1	4.8
16. Teaching offers me an avenue of escape from the harsh realities of life	76.6	17.7	4.0	0.0	0.8

(Table continued on next page)

TABLE 28 (continued)

REASON	RESPONSE CATEGORY				
	Least	Slightly	Half/half	Much	Most
17. I like the continuous opportunity to learn .	0.0	4.8	21.8	42.7	29.8
18. Teaching allows me to express hostility without too much criticism	71.0	19.4	7.3	0.0	0.0
19. Teaching offers me the chance to be creative	1.6	5.6	29.8	41.9	21.0
20. Training for teaching involves less time, money, and effort than do many other professions	11.3	46.8	37.9	3.2	0.0
21. Teaching is a good job to fall back on in case of emergency.	0.8	11.3	40.3	31.5	14.5
22. I can utilize my capabilities, e.g., public speaking, organization, leadership, etc. . .	0.0	13.7	53.2	21.8	10.5
23. Teaching offers me a continuous opportunity to relive periods of my childhood.	42.7	32.3	23.4	0.8	0.0
24. I like to give and receive love to children	0.8	6.5	39.5	33.1	19.4
25. Teaching offers good financial returns in the beginning with a minimum of experience .	7.3	20.2	55.6	16.9	0.0

TABLE 29

Factor Loadings of 25 Reasons for Teaching

Reason No.[a]	Factor							
	I	II	III	IV	V	VI	VII	h^2
1	27	-02	16	11	-18	-05	08	15
12	-51	08	-07	23	-11	-22	27	46
18	39	00	-08	-01	02	-11	-12	18
20	-41	-04	-13	-37	-02	-16	-22	41
22	24	23	-20	06	-16	18	06	22
10	-03	-41	-02	07	-36	11	06	32
16	04	-68	02	14	07	-05	02	50
14	16	-01	32	-05	-07	-17	-30	25
19	-02	04	-54	05	-03	-04	04	30
23	-03	06	-28	04	19	-08	-02	12
25	-11	10	53	-20	19	02	01	38
2	26	13	07	-40	11	-15	-16	31
6	04	02	20	-60	08	06	-01	40
15	07	-05	-03	44	02	-02	-03	20
4	10	-01	-04	02	52	-15	08	31
7	11	07	-01	13	-64	02	-11	46
8	04	03	29	-02	41	18	-15	31
5	15	-06	-04	-08	-31	56	-11	46
13	05	-13	-10	24	-12	-33	-13	22
17	-01	31	-10	30	-25	40	-12	41
24	-11	-03	12	08	-01	60	-18	42

(Table continued on next page)

TABLE 29 (continued)

Reason No.[a]	Factor							
	I	II	III	IV	V	VI	VII	h^2
3	03	-09	-06	-05	06	-05	67	47
9	00	13	07	-05	15	-11	45	26
11	11	11	-05	-14	12	16	-40	24
21	11	02	15	-25	03	-04	-46	31

Note: Decimal places have been omitted.

[a] Reasons are listed in Table 28 and in Student Questionnaires - Forms A and B.

TABLE 30

Description of Factors Derived from Responses to the Scale of Motives for Teaching

Factor	Reason No.	Description
I	1, 12, 18, 20, 22	Materialism - self-centeredness
II	10, 16	Resolution of psychological needs
III	14, 19, 23, 25	Expediency
IV	2, 6, 15	Dedication
V	4, 7, 8	Power
VI	5, 13, 17, 24	Maternalism
VII	3, 9, 11, 21	Intellectual challenge and competitiveness

TABLE 31

Ratings by Cooperating Teachers and Seminar Leaders of Teacher Aides' Potential for Becoming Good Teachers

Rater	Rating					
	Definitely Yes	Probably Yes	Probably No	Definitely No	Can't really tell	Total
Cooperating Teacher	19	20	0	0	14	53
Seminar Leader	20	24	4	0	5	53

TABLE 32

Extent of Agreement Between Cooperating Teachers (CT) and Seminar Leaders (SL) in Rating Teacher Aides' Potential for Becoming Good Teachers (N = 53)

Extent of Agreement	N	%
Perfect Agreement[a]	20	37.7
Close Agreement[b]	14	26.4
Disagreement[c]	19	35.9

[a] CT and SL gave identical ratings.

[b] CT rated student "definitely yes," SL rated him "probably yes" or vice versa.

[c] CT rated student "definitely yes," "probably yes," or "can't really tell; SL rated him more than one category removed.

The Teacher Aide Program

Several rating forms and reactionnaires were developed in order to check on the progress of the various segments of the program, to allow the investigators to modify aspects of the program deemed necessary for its success, to provide feedback information to all participants, and to gather information which may be useful in setting up future teacher aide programs.

This section will present the results of analyses of comments, reactions, criticisms, and suggestions regarding the Teacher Aide Program offered by: (1) teacher aides; (2) cooperating teachers, and (3) seminar leaders.

Perceptions of Program by Teacher Aides

Sources of information regarding teacher aides' perceptions of the program include: (1) the Mid-semester Evaluation of Program form, (2) the Interview Schedule, and (3) a formal and numerous informal interviews with the students.

Mid-semester Evaluation of Program

Listings of comments made by the Teacher Aides on the Mid-semester Evaluation of Program form are found in Table 36.

Activities and experiences which the aides mentioned most frequently were working with individual children and the observation of classroom activities Other experiences, listed in descending order of frequency, were: examination of instructional materials, teaching an entire class or a group of children, holding conferences with cooperating teachers, performance of various "aide" activities, and the preparation and marking of tests and exercises. The greatest proportion of the aides' time was spent in observation of various classroom activities.

About one-third of the aides, at the mid-semester period, felt that their observations were "particularly valuable," about another third indicated that they were doing too much observation. Nearly all of the aides would have liked a greater variety of observation and more firsthand experiences with children, including some teaching.

Two-thirds of the aides believed that the seminars enabled them to discuss and share their teacher aide experiences and about half thought that they had been helped to integrate the theoretical knowledge acquired in the college classrooms with their practical experiences in the schools. Most frequently, the aides called for even greater integration of theory and practice and for more participation on their part in the seminar deliberations, i.e., less seminar leader-centered discussions.

While the majority of students were satisfied with the lectures, about one-third noted that the lectures tended to be too theoretical and neglected to show the relationship between psychological theories and actual classroom practices.

An analysis of the comments offered by the teacher aides suggested that a sizeable number of aides did not have the variety of experiences the investigators had hoped they would have. Steps were taken to improve the quality of the teacher aide experiences, the seminars, and the classroom lectures.

Interview Data

During the last week of the project's operation, the aides were asked to use their log notebooks and to record their experiences and activities in the Interview Schedule, checking whether these were considered "especially valuable," "valuable," or "not valuable." A detailed listing and the assessment of these experiences is found in Table 37 for the ETA[4] and in Table 38 for the STA[5]. Table 39 shows teacher aides' responses to other sections of the interview schedule: positive and negative comments regarding the sum total of their experiences, positive and negative comments concerning the seminars, specific criticisms of the program, and specific suggestions for improving the program. These interview schedules were used in interviews held with all teacher aides.

Experiences and Activities

Aides were required to spend two hours per week for 14 weeks in the schools. Table 33 presents an estimate of the time aides devoted to various

TABLE 33

Estimate of Time (Hours) Devoted to Teacher Aide Experiences and Activities

	ETA (N = 36)		STA (N = 17)	
Experience and Activity	Mean	S.D.	Mean	S.D.
Observation	14.03	3.95	18.94	6.54
Teaching	3.67	2.97	4.06	5.82
Examining instructional materials, records, equipment, etc.	3.25	2.18	4.76	2.97
Activities related to teaching	6.67	3.84	7.65	7.34
Conferences and discussions	3.03	2.93	4.12	2.89
Total	30.64	1.43	39.53	3.45

[4] ETA - Elementary School Teacher Aides

[5] STA - Secondary School Teacher Aides

activities. The ETA spent, on the average, more than 30 hours, the STA more than 39 hours in the schools. During the Easter holiday, most of the STA accepted an invitation to spend portions of two days in the Teaneck High School, which accounts for the discrepancy in time between the ETA and STA.

(1) Observation

The overwhelming majority of the aides (83% ETA, 95% STA) considered their observations of classrooms to be either "especially valuable" or "valuable." The rating "especially valuable" was given by 55% of ETA and 59% of STA. A minority (17% ETA, 6% STA) regarded their observational experiences as "not valuable."

All aides were able to observe parts of the school plant. About 75% of the ETA and 82% of the STA found their observations of the school plant to be either "especially valuable" or "valuable." About 25% of the ETA and 18% of the STA felt that these observations were "not valuable."

None of the ETA and only three STA reported visits to laboratories. About one-third of all aides observed assemblies and other special programs. Almost half of the aides observed film showings. Nearly 50% of the ETA, but only one STA saw co- and extra-curricular activities and these were considered "especially valuable."

(2) Teaching

A substantial number of teacher aides reported having some form or combination of teaching experience: teaching an entire class (56% of ETA, 59% of STA), teaching part of a class or group of children (69% of ETA, 41% of STA), and working with individual children (83% of ETA, 76% of STA). The greatest proportion of these aides regarded their teaching experiences as "especially valuable"; no aide regarded his teaching experience as "not valuable. Most aides told the investigators that their teaching experience was the high point of the program, the experience which made it most worthwhile.

(3) Examining Instructional Materials, Records, Equipment, etc.

The aides reported having a variety of experiences involving the examination of instructional materials, records, and equipment. Among the experiences mentioned most frequently were the examination of teacher guides and manuals, text books, displays, copies of teacher-made tests, and teacher grade books. The overwhelming majority of the aides regarded these experiences as being "especially valuable" or "valuable."

(4) Activities Related to Teaching

The teacher aides participated in a wide variety of activities related to teaching which were to aid the cooperating teacher. Overall, the range of experiences was greater for the ETA who reported about 20 different types of activities as compared with about 13 for the STA. This difference might be accounted for in part by the subject matter specialization of classes in the high school as compared with the self-contained elementary school classes. Among the activities mentioned most often by all the aides were correction of tests, correction of homework and classwork papers, operation of ditto and mimeograph machines and the preparation and typing of stencils.

While judgments of "especially valuable" and "valuable" exceeded those of "not valuable" by about 9 to 1 (STA) and 5 to 1 (ETA), more negative opinions were expressed in this area of activities related to teaching than with regard to any other categories. It became apparent very early in the program that the teacher aides did not always like or automatically appreciate doing the routine activities which are usually required of and performed by teachers. Many of the students assured the investigators that they were fully cognizant of the many routine tasks performed by teachers and that they would have to do these when they became teachers, but they felt that there were more "important" things they could be doing as teacher aides, especially since their time was so limited. When questioned about these, they usually said they meant more direct contact with children or actually teaching a lesson.

The investigators were sympathetic to the aide's point of view, but felt that they benefited from this "reality exposure" and, more important, gained an understanding of the important relationship of routine tasks to getting the whole job done by the classroom teacher. This point of view was stressed in the investigators' contacts with the teacher aides.

(5) Conferences and Discussions

Practically all of the aides reported conferences and discussions with their cooperating teachers and 32 out of 34 ETA and 15 out of 16 STA felt that these were "especially valuable" experiences. Over 80 percent of the aides mentioned having had informal discussions with the school children and over 50 percent reported conferences and discussions with various school administrators. They regarded these contacts as being either "especially valuable" or "valuable." Other conferences and discussions were held with curriculum specialists, guidance counselors, librarians, and other teachers. Their reaction to these contacts was quite positive.

Overall Assessment of Teacher Aide Experiences and Activities

The aides were asked to make a global rating of all their experiences and activities in the Teaneck schools on a scale which ranged from "0" (worthless) to "10" (extremely worthwhile). Mean ratings given by the ETA and STA are shown in Table 34.

It can be seen that the aides rated their experiences very highly and that the ETA and STA did not differ significantly in their global assessment.

TABLE 34

Summary Rating of Teacher Aide Experiences and Activities

	N	Mean	S.D.	t	P
ETA	36	8.24	1.49	1.02	$> .05$
STA	17	7.76	1.65		

In addition to this rating, positive and negative comments were elicited, which are listed in Table 39, Sections IIIa and IIIb.

The ETA offered twice as many positive and one and one-half as many negative comments than did the STA. For example, about 50% of the ETA against less than 25% of the STA commented that the TAP made theory and practice more realistic. On the other hand, over 50% of the STA commented that the TAP was a good experience compared with 36% of the ETA. Some of the other positive comments made frequently by ETA were to the effect that the TAP made for a more positive attitude towards choosing teaching as a profession, that the aides learned what to expect in the future, that it was good to have actual experience early in their college career, and that they had become aware of the problems faced by teachers. Overall, the 118 positive comments made by the 53 aides indicated a considerable reservoir of positive feeling about the program.

Among the most frequent negative comments of the ETA were those about the lack of variety in the program and the fact that they spent too much time observing and not participating sufficiently in classroom activities. Nearly a fourth of the ETA expressed this opinion. The major negative comment of the STA dealt with the lack of continuity in their experience from week to week in the school. Nearly a fourth expressed this view.

Assessment of the Seminars

Table 39, Sections IVa and IVb, presents a listing of positive and negative comments given by the aides with respect to the seminars.

The total number of negative comments (74) was not quite as large as the number of positive comments (85), but many were sharply critical. A number of the aides seemingly expressed "transference" reactions, strongly positive or negative, towards their seminar leaders and as might be expected often the same seminar leader was the recipient of both kinds of reactions. No specific pattern of negative comments emerged, though about 17% felt that the seminar leader should have allowed more discussion. There was a tendency for certain individual aides to level a number of criticisms against the seminars and for others to find little or nothing that was wrong with them. When interviewed a number of aides expressed the opinion that several of seminar leaders dominated the class, others complained that the discussions were "forced."

Perhaps, many aides who ordinarily had been able to "escape" into the relative anonymity of the lecture type class felt threatened and on the spot in the small seminar groups. In contrast, the more active, talkative aides may have found sharing discussions with others difficult.

The aides were asked to give their positive and negative comments about the seminars. Their most frequent positive comment related to the benefits they derived from the discussions held with each other and with the seminar leaders. A number of the aides commented on the lively, highly motivated sessions they had in which they were able to compare experiences and points of view. Some felt that they had learned quite a bit about the problems of teachers and students, about teaching techniques, and the relationship of their classroom observations to theory. Where they did not mention integration of theory and practice specifically, some aides commented that their questions about teaching were answered, that they learned what to look for in the classes, and that their classroom observations were clarified.

Realization of Objectives of Teacher Aide Project

The teacher aides were asked to what extent they thought their experiences and activities had: (1) helped them better learn psychological theories and principles relevant to teaching (Objective I), (2) increased their understanding of the many roles performed by teachers (Objective II), and (3) crystallized their decision to become or not become a teacher (Objective III). Their responses are found in Table 35.

TABLE 35

Realization of Objectives of Teacher Aide Program as Perceived by Teacher Aides

Objective[a]	RESPONSE					
	Definitely Yes	Probably Yes	Don't Know	Probably No	Definitely No	Total
I	17	25	5	4	2	53
II	43	9	0	0	1	53
III	28	16	6	2	1	53

[a] Objective I: Learn better psychological theories and principles relevant to teaching

II: Increase understanding of many roles performed by teachers

III: Crystallize decision to become or not become a teacher

The overwhelming majority of aides felt that the three-pronged objectives of the program had been realized. They thought that the program was especially instrumental in helping them better appreciate the roles of teachers (81% of the aides indicated "definitely yes") and that it was least effective in teaching them psychological principles related to teaching (32% of the aides checked the category "definitely yes"). The results tend to agree with the students' subjective impressions.

Criticisms and Suggestions for Improving the Teacher Aide Program

Lastly, the aides were asked to offer specific criticisms and suggestions for improving the program and these were discussed with them in personal interviews. Proportionately, there was little difference in the number of criticisms made by the ETA and the STA, but the former volunteered about a third more suggestions for improvements. Since their criticisms could often be interpreted as implied suggestions for improvement and vice versa, they will be treated here together. Listings of these criticisms and suggestions are to be found in Table 39, Sections VIa and VIb.

The most frequent criticism of the TAP was directed to the lack of flexibility in the classroom assignments. While a number of the aides were able to work out acceptable modifications, in general, the aides objected to seeing the same class, the same subjects, and even the same cooperating teacher at a fixed time every week. The overwhelming majority of criticisms and suggestions regarding this came from the ETA. Their suggestions for obtaining greater variety in their experiences included visits to the schools at differently scheduled times, visiting other classes, grades, and schools, and spending an entire day or at least longer periods of time in the school. About 15% of the aides felt that they had spent too much time in observation. They suggested that the aides be permitted to do more teaching, work more closely with children, and generally participate to a greater extent in classroom activities.

Slightly less than half of the STA criticized the lack of continuity in their experiences. Typically, a block of work was introduced to the children before the aide arrived and often the aide never saw it brought to completion since he was in the classroom such a limited period of time. About one-third of the STA also felt that the program took up too much of their time from college and other duties, but this feeling was apparently not shared by the ETA.

About a fourth of the ETA and the STA felt that they and the cooperating teachers were unsure regarding what they were supposed to be doing or accomplishing in the program and that a more comprehensive orientation should have been provided.

Perceptions of Program by Cooperating Teachers

A listing of comments and criticisms of the program are found in Table 40.

In general, the cooperating teachers believed that the contributions of the aides were constructive. They submitted 168 examples of constructive contributions as contrasted with only 8 examples of non-constructive contributions. Examples of constructive contributions to the work of the cooperating teacher included: (1) correction of homework and other class work; (2) arrangement of classrooms and laboratories; (3) assisting in the teaching of classes; (4) preparation, administration and correction of tests; (5) tutoring and teaching of individual students; and (6) the maintenance or records and reports (clerical duties) (Table 40, Section 2).

Several cooperating teachers believed that constructive contributions of the aides were limited by the lack of time available to provide the necessary guidance and explanation and that they could not afford to take out time from classroom teaching for this purpose. Others commented that the considerable time spent by the aides in just observation did not represent a constructive contribution to the work of the classroom (Table 40, Section 3).

In addition to above, the cooperating teachers submitted a number of other critical comments regarding the TAP. These are listed in Table 40, Section 7a. Critical comments which appeared most frequently were the following: (1) lack of continuity in the aides' work with children, (2) the awkward timing and limited duration of the school visits; (3) lack of time available for cooperating teachers to give adequate instructions and information; (4) the lack of experience and training of the aides which limited their contribution; (5) the fact that aides saw the same class and subject every time unless the teacher was able to change the curriculum presentation and order; and (6) the limited assistance really obtained from the aides.

Listed in Table 40, Section 7b, are a number of suggestions for improving the program. The recommendation cited most frequently was that aides should come into schools for a longer time period per visit and that the visits should be more concentrated within a few weeks rather than spread out over 14 weeks.

Several teachers called for better preparatory training of the aides, more time for discussions and instructions, and participation by the teachers in the seminars. While no "head count" is available, many of the cooperating teachers expressed the feeling that their work should have been compensated, either financially, or with the opportunity to take courses for credit at Fairleigh Dickinson University without charge. Most of these suggestions were reiterated at the mid-semester evaluation and review meeting and in the personal interviews with the teachers both at mid-semester and towards the end of the program.

Perceptions of Program by Seminar Leaders

The seven seminar leaders filled out the Seminar Reactionnaire - Form SL-M at mid-semester and Form SL-E at the end of the semester, thus offering a third perspective on the Teacher Aide Program.

In Form SL-M, in response to the query whether the objectives of the seminars were being realized, six of the seven responded in the affirmative.

The seminar leaders reported at mid-term that on the basis of students' comments particularly valuable experiences were considered to be those involving contact with and working with individual children, teaching a group of children or a class, and the observation of competent teachers at work. Other particularly valuable experiences included the performance of "aide" activities, conferences with the cooperating teachers, the firsthand observation of principles and situations discussed in the seminars, and the opportunity of tutoring emotionally disturbed and foreign students.

Experiences considered by the aides not to be particularly valuable were those involving monotonous, routine activities and the observation of teaching with visual aides.

While the seminar leaders generally believed that the lectures provided a satisfactory theoretical foundation in educational psychology, the majority commented on the difficulties of integrating theoretical principles with their practical application in the classroom. One seminar leader suggested that specific concepts and techniques needed to be identified for use in the seminars and classrooms.

Finally, at mid-semester, a number of suggestions to improve the TAP were offered by the seminar leaders. For instance, it was recommended that the cooperating teacher should vary her daily program on the days that the aides visit the school and that only one aide be assigned to a cooperating teacher. One seminar leader stated that aides should have more refined and specific information concerning what to observe in the classrooms and that particular things should be pinpointed for the aides to observe and report on in the seminars. Other suggestions were that the aides spend less time in observation and more in participation and that there be a greater continuity of experience, perhaps by having students go to schools on successive days, rather than two hours one day per week. It was recommended that the seminar leaders be provided with a detailed outline of the materials covered in the lectures, that the seminar leaders and lecturers needed a coordinated list of concepts, techniques and procedures, and that the seminars be more structured. One seminar leader believed it would be valuable if the seminar leaders were able to sit in on the lectures.

At the end of the semester the seminar leaders were asked on Form SL-E whether they believed that the TAP should become an integral part of teacher training prior to student teaching. They all agreed that this should be the case amplifying their opinion with the following comments: (1) the earlier the students get into actual classroom situations the better their understandings; (2) students should be allowed to experience actual application of theory; (3) such a program was most valuable; (4) a TAP would provide more meaning, not only for Educational Psychology, but for methods courses as well; (5) the program would provide a tie-in with theory and would lend towards understandings in subsequent teacher training courses; (6) such a program would permit the student to see the responsibilities of teachers before assuming these in student training and for many this might prove a terminal experience.

The seminar leaders were asked whether or not they believed that it would be worthwhile to extend the program, perhaps with emphasis upon observation, to courses in Child and Adolescent Psychology, which in the current Fairleigh Dickinson University curricula precede Educational Psychology. Three of the seven seminar leaders believed such an extension would be advisable, commenting: (1) the greater the application of principles and knowledges to classroom procedures and practice, the better the preparation; (2) that observations are a vital part of Child and Adolescent Psychology, and (3) that arrangements could be made in other than public school classrooms. However, four of the seven seminar leaders advised against an extension of the program, giving as their reasons: (1) students need sufficient instruction and understanding of principles in order that they can intelligently look for and evaluate classroom situations, (2) the present limitations in the program should first be eliminated, and (3) a semester of a TAP would suffice.

The seminar leaders made a number of valuable suggestions to improve the TAP. A greater overall coordination of effort among the lecturers, seminar leaders, and cooperating teachers was called for. This might be accomplished by; (1) closer coordination of the content of the lectures and the seminar discussions, (2) an occasional interchange of places between lecturers and seminar leaders, and (3) having the cooperating teachers participate in the seminar sessions. It was believed that the teacher aides would greatly benefit if the cooperating teachers were given additional time to consult with them, if they could observe several grade levels and generally be exposed to a greater variety of experiences, and if the visits to the schools could be made more concentrated over several days, rather than spread out one day per week for 15 weeks.

Specific criticisms of the program by the seminar leaders were directed to the lack of continuity in the aides' experiences. It was believed that aides were not able to observe a complete segment of classroom work, that often the aide came into the class when a unit had been started or was well on its way towards completion. This made it difficult for the aide to appreciate the objectives of the cooperating teacher. One seminar leader stressed the lack of variety and diversification in the experiences of some aides and felt that all aides needed to observe many different classrooms in order to have a basis for comparison of classroom situations.

Summary: Perceptions of the Teacher Aide Program by Teacher Aides, Cooperating Teachers, and Seminar Leaders

The overall reaction of the aides, teachers, and seminar leaders to the program was quite favorable.

As the program got underway, the number of aides who believed that their experiences and activities were worthwhile increased significantly. At the end of the program, the aides' favorable reaction was clearly demonstrated by their mean rating of 8 on a rating scale ranging from 0 ("worthless") to 10 ("extremely worthwhile") on which the aides assessed the sum total of their experiences in the Teaneck schools.

Criticisms of the program by the aides included the following: (1) too repetitive; (2) too much observation; (3) too much routine and "busy" work; (4) lack of continuity from week to week; (5) insufficient variety of subjects, classrooms, teachers and teaching methods; (6) insufficient time devoted to program; and (7) lack of discussions with cooperating teacher.

In general, most of the criticisms of the cooperating teachers and seminar leaders touched upon these same points raised by the aides.

The overall reaction of aides to the seminars was favorable with many of the aides expressing very strong reactions, both positive and negative. Numerous positive comments were offered regarding the value of the seminar discussions, the clarification and interpretation of their school experiences, and the tie-in of theory and practice. Negative comments were directed to the seminar leader-centeredness of the discussions, the lack of integration with lecture materials and, in some instances, with aide experiences, and the limited participation of some students.

Aides were encouraged to express their opinions regarding the lectures, though the investigators were aware that concern about their final grades might have inhibited them somewhat. Overall, their reaction was quite favorable; a frequent "criticism" was that the two hours of lecture was not enough. Critical statements included comments to the effect that the lectures were: (1) too theoretical, (2) not enough concrete examples or cases were cited, (3) not integrated with the text and outside readings, and (4) not sufficiently related to their classroom experiences in the schools or to their seminar sessions.

Generally, the cooperating teachers responded enthusiastically to the challenge and responsibilities of the TAP. Most of the cooperating teachers shared the conviction that a greater integration of theory and practice was needed in the training of future teachers and that there were distinct advantages of doing this early in the student's training period. Despite the receptive attitude of most of the cooperating teachers, there were indications that their pre-program orientation should have been more intensive.

Most of the cooperating teachers who offered comments believed that the contributions of the aides were constructive, but these contributions were limited by the lack of time available for guidance and explanations. Most of them reported that their students were enthusiastic and very cooperative. Two hours per week scheduled at the same time per week was considered too short and discontinuous an exposure to the classroom. A minority of teachers expressed the belief that they were putting more into the program than they were receiving in the way of assistance from the aides and that the teachers deserved some form of compensation and/or recognition.

The seminar leaders indicated that the seminars had realized their objectives though they recognized that sophomore students did experience some difficulty in integrating theory and practice. They suggested closer coordination of material and activities with the cooperating teachers and lecturers and mentioned a number of steps that could be taken to improve the quality, continuity, and variety of the aide's experiences in the school classrooms. The seminar leaders agreed that a teacher aide program should become an integral part of teacher training prior to student teaching, but were divided with respect to whether or not it would be worthwhile to extend the program to courses in Child and Adolescent Psychology.

It was the purpose of this study to determine the extent to which a Teacher Aide Program can make Educational Psychology a more useful course. Did the program developed for this study serve this function? The answer is "yes" if we consider the varied subjective comments and impressions offered by the project participants - the teacher aides, the cooperating teachers, the seminar leaders, several school administrators, and the investigators themselves. However, the answer is by and large "no" when the evidence derived from the objective criteria applied in this project is examined.

CHAPTER IV

DISCUSSION

Many authorities, for example Conant (1963), seem convinced that firsthand contact with children in schools is an important aspect of teacher training. Though studies have been cited that do not bear out the positive advantages of direct experience prior to student teaching, most of the reported studies, mainly descriptive in nature, stress its benefits. In the present study, the highly positive assessment of the Teacher Aide Program (TAP) by the aides, cooperating teachers, and seminar leaders can be contrasted with the performance of the aides on the test instruments. Their performance was, in general, not significantly better than the performance of students who did not enjoy the alleged benefits of this direct experience in the schools.

No significant differences were found between the treatment groups in the learning of psychological principles relevant to teaching, in their enhanced understanding of the duties and assignments that teachers have in addition to classroom instruction, and in their commitment to a teaching career when these were measured on the instruments developed for this study. However, the treatment groups differed significantly in their increased understanding of the many roles teachers play, with the experimental group demonstrating the greatest (statistical) gain. At the very least, the results of this study appear to be in consonance with the conclusion of Hurst et al. (1961) that the typical evaluation tools used in educational psychology are limited in their ability to gauge complex outcomes. The Achievement Test in Educational Psychology (ATEP) and the Student Questionnaire can be considered to be such traditional tools, though perhaps not the Case Studies in Teaching (CST). However, the use of the latter instrument did not result in any significant findings either.

In view of the inherent limitations of multiple choice tests such as the ATEP, additional testing instruments might have been developed which conceivably could have measured more sensitively the conceptual and attitudinal changes in students' development. As an example, essays written by students before and after their aide experiences may have reflected a growing sophistication in their understanding of psychological principles and of teacher duties. While such essays also present problems in scoring, global, "clinical" ratings by experts might have revealed untapped information regarding the impact of the TAP upon these students.

In the present study the majority of the subjects had at least two or more psychology courses prior to their enrollment in Educational Psychology. In another institution, the prerequisites for, the scheduling of, and the content of Educational Psychology are probably quite different than is the case at Fairleigh Dickinson University. Also, the sample available for this study was rather small. In view of this, there is certainly no justification for a blanket generalization that the results obtained from other teacher aide programs would uniformly yield non-significant results with respect to the basic questions raised in this study. In fact, and this will be developed later in this chapter, there are reasons to believe that a modified program might produce very significant changes in the aides. Nevertheless, accounting for non-significant data is always a difficult task, where rationalization can easily assume the garb of reasonable interpretation. With this caution in mind, therefore, there follows a discussion and interpretation of the results obtained in this project.

Question No. 1

The students enrolled in experimental educational psychology sections did not learn psychological theories and principles relevant to teaching better than did students enrolled in the conventional psychology sections. The expectation that the experimental group would demonstrate superior learning on the two criterion tests was based on the assumption that the teacher aide experience would have provided these students with a wealth of concrete examples which would have made the learning of concepts easier for them. It would appear that the aides were not capable of transferring the understanding of their experiences to the act of making a correct response to one of several alternatives on a multiple choice test or to a brief case history from which the correct principle had to be inferred. A number of possible reasons can be put forward for this inability Apparently, in preparing for taking the criterion tests, the results of which were used in arriving at their final grade, the experimental students developed the same test taking "set" as the students in the control groups. They studied the text, their lecture and outside reading notes, but seemingly made little effort to systematically integrate or otherwise pull these together with their school and seminar experiences which were less structured.

Also, while the cooperating teachers no doubt employed certain psychological principles in carrying out their work, most were too busy to make these principles explicit in a manner that would clarify, deepen, and extend the aide's understanding. Furthermore, not every effective teacher is capable of explaining the theoretical basis for her actions and decisions, nor for that matter is consistent in the way she applies these principles. In the limited time which the aides spent in the classroom they learned specific techniques, such as how to run a ditto machine, mark a test, take a book inventory, prepare a lesson, etc., helpful, no doubt, to the teacher, but these activities were not necessarily conducive to the learning of theoretical principles.

In the seminars, the aides received much valuable information regarding the operation of the schools and the work of the teacher. The seminar discussions were considered valuable by the aides and their contact with these experienced teachers was regarded as meaningful. Yet, the coordination of the theoretical materials of the lectures with the seminar discussions could have been closer. It is probable that much of the information and insights gained by the aides in the seminars was tangential to and not directly applicable to the test questions. Where theoretical materials were considered in the seminars in relation to the aide's practical experiences, the timing, stress, and possibly interpretations given were not necessarily consistent with the lecture materials. All the groups made significant gains in their scores on the ATEP, though the analysis of variance indicated no significant difference between the groups. This situation obtained despite the fact that the experimental group received one hour of lecture less than the students in Group C2 and the third hour for the students in Group C1 was devoted to discussion of the previous two hours of lecture. One can only speculate how well the experimental groups would have fared if they had had this third hour of college instruction in psychological theory plus their other experiences in the schools and seminars.

The majority of the students enrolled in the educational psychology sections came with at least two or more previous courses in psychology. While there is a different emphasis and focus in Educational Psychology, much of its theoretical content is derived from the basic theory already learned in these other courses. The finding of high pretest scores made by the students on the ATEP and the CST bears this out. While the instructors may have wished for better performances by all the groups in the posttests, there was relatively little "room at the top."

Because of the limited time available and the large body of information that needed to be imparted, the lectures were primarily devoted to theoretical presentations with only minimal amounts of illustrative materials, case studies, and examples provided to demonstrate practical application. This too could mean that the lectures were not as helpful in assisting the aides integrate their practical experiences with theoretical principles as they might have been.

Question No. 2

On the basis of the statistical analysis of the data it was concluded that students enrolled in experimental educational psychology sections did demonstrate a greater understanding of the many roles performed by teachers than did students enrolled in conventional educational psychology sections. However, the actual mean gains for all groups were rather slight, i.e., less than two teacher roles for students in group E. Moreover, the teacher aides did not significantly increase their understanding of the many duties and assignments which teachers have in addition to classroom instruction.

Considering the fact that students had spent many years in public schools, were enrolled in college as education majors, and were strongly committed to teaching, the small number of roles, duties and assignments listed, on the average, by the students in all the groups is surprising.

It had been anticipated that the aides, in particular, who had assumed many of teacher roles, who participated in a wide variety of duties and assignments or had observed their performance by the cooperating teachers, and who commented on the value of their experiences would have been able to list a far greater number of these roles, duties, and assignments. However, many of these students apparently were able only minimally to recall and list teacher duties and roles which they had observed and experienced. Perhaps some students felt unmotivated to list more than a few roles and duties, while others may have felt that they were documenting the obvious, or that the investigators were only interested in unusual roles. The performance of a good number of students might be considered analogous to the young inarticulate child who, upon being asked by his mother where he was all day and what he did, replied "out" and "nothing."

There is little reason to doubt that the aides would recognize that teachers do perform a wide variety of duties and assignments other than instruction or that teachers play many roles, if this were pointed out to them by the cooperating teachers. However, much of the learning of the aides apparently was "perceptual-motor" in nature. The cooperating teachers demonstrated the kinds of things teachers do or showed the aides how to carry out certain specific tasks. While this may have increased the aide's awareness of what goes on in the classroom, it seems that the aide also needed additional help from the cooperating teacher, seminar leaders and college instructors in analyzing and verbalizing what the teacher actually does while teaching. The objective of such help is not merely enhanced ability to verbalize, but the building of a broader concept of what the aide's own behavior will be when he or she becomes a teacher.

Question No. 3

Students enrolled in experimental educational psychology sections did not better crystallize their commitment to a teaching career than did students enrolled in conventional psychology sections.

The mean ratings of the three groups on the pretest ranging from 76.77 to 81.07 indicated that at the beginning of the project the students were already highly committed to a teaching career. They were a rather selective group; all were enrolled in a teacher training institution and had done acceptable work in their previous college courses. A high degree of commitment was not entirely unexpected under these circumstances. It would appear that the aides' initial high commitment to teaching was not basically shaken or changed by the varied experiences of the TAP. In light of their many positive comments, it is very possible that this commitment, already very high for many, was confirmed and even strengthened.

Auxiliary Analyses

Certain auxiliary data had also been collected and analyzed with respect to (a) "ideal" vs. "realistic" preferences for a teaching or non-teaching career, (b) changes in choice of teaching level and/or subject, and (c) changes in ratings of reasons regarded as influential in the choice of teaching.

On the posttest, the preference patterns of students in Groups C1 and C2 shifted in opposite directions. Fewer than expected of the C1 students and more than expected of the C2 students indicated that teaching was their "ideal" choice. However, the preferences of Group E underwent essentially very little change. No ready explanation can be offered for the shifts of students in Groups C1 and C2, but it can be inferred that the experiences of the TAP did not significantly alter the aides' preferences for teaching as the "ideal" or "realistic" career. Actually, in terms of actual numbers of students, only 8 out of 124 students, or about 6 percent, shifted from non-teaching to teaching in denoting their "ideal" occupational choice. Nevertheless, it would appear that, at least from the data in this study, the TAP experiences tended to stabilize occupational preferences.

While definite conclusions cannot be drawn from such a small sample, the finding that over a fifth of all the students enrolled in a program of teacher training (28% on the pretest and 22% posttest) would "ideally" not select teaching as their career deserves mention. Further exploration of the relationship of "ideal" vs. "realistic" preference of teaching as a career to subsequent occupational success is indicated, particularly in light of the high dedication to the profession called for from teachers.

Only one out of 71 students in Groups C1 and C2 indicated a different choice of teaching level and/or subject on the Student Questionnaire, but 7 out of 53 aides indicated a different choice at the end of the program. Interviews with the teacher aides suggested that these changes were attributable to their school experiences. This finding suggests that it may be advantageous to expose students to the grades and subjects they think they would prefer to teach prior to their student teaching assignment. A change of choice at this juncture will be less disturbing and may result in a better student teaching performance.

In order to explore further in depth the motivations of the students for teaching and to determine whether the experiences of the TAP would significantly modify these expressed motives, all the subjects were asked to complete the Scale of Motives for Teaching. Inasmuch as the groups at the beginning and at the end of the program did not differ significantly in their ratings, it was inferred that the impact of the experiences of the TAP when compared with the effect of the conventional course in educational psychology did not significantly change the ratings of reasons regarded as influential for choosing the teaching profession.

Discussion of Qualitative Findings

The aides, cooperating teachers, and seminar leaders evaluated the TAP favorably. They pointed out that with certain improvements and modifications the values derived from such a program would be greatly enhanced. This optimistic evaluation of the TAP must be balanced against the evidence derived from the objective measuring instruments used in this study.

It is quite plausible that the TAP had effects (positive or negative) which were not measured by the devices used in this study or which were verbalized by the project participants. One must always guard against the tendency of subjects to offer socially desirable answers to authority figures. Thus, verbalized responses must be taken with a grain of salt.

While further carefully designed evaluative research is urgently needed, one can speculate that students who have participated in a TAP perceive their education courses and instructors differently. They bring to the lectures and discussions their own observations and opinions based on firsthand experience, their growing awareness of the changes and ferment in educational practices, and their recognition of the variety of approaches used by teachers. It is hoped that there will have been considerable rethinking and confirmation of the student's interest in a teaching career.

Whether or not an improved and modified TAP would demonstrate a measurable and significant integration of theoretical principles and practical experience still must be determined.

Recommendations for Developing Teacher Aide Programs

In view of the positive subjective reactions, criticisms and suggestions for improvements offered by those who actively participated in the program, further research and experimentation is recommended to develop an improved teacher aide program integrated with Educational Psychology. It is also suggested that research be carried out regarding the value of direct experience programs integrated with other professional courses, such as General Psychology, Child and Adolescent Psychology, and various methods courses which deal directly with the teacher-learner situation and process.

As a result of the experience gained in this pilot study, certain recommendations can be made which might be helpful to other institutions wishing to embark on such programs. These recommendations take into consideration (1) the selection of schools and cooperating personnel, (2) the establishment of working relationships with the school staffs, (3) the nature of the aide's learning experiences, (4) the evaluation of the aide's progress and growth, and (5) evaluation of the performance of the seminar leaders and cooperating teachers.

Selection of Schools and Cooperating Personnel

It is recognized that many different kinds of schools could be used in a teacher aide program. There are, however, certain criteria for selection which should be met. The school children should represent a wide range of ability, interests, and needs, and even special problems. Physical facilities and equipment should be adequate and comparable to those expected in most schools. Most important, the educational program and professional staff should be of high quality. As a very practical consideration, the schools selected should be located close enough to the college campus to make quick travel back and forth possible. Where large number of aides operate under tight and varied schedules, this becomes a most important administrative consideration. The Teaneck public schools used in the project met these criteria admirably.

The support of the Superintendent of the Schools and the Board of Education, as well as the university administrative staff, is essential for embarking upon and carrying out the many complex requirements of such a program. The designation of a member of the public school staff as its project coordinator provides a "hot line" to the schools which can be of tremendous help in the solution of many problems.

The cooperating teachers must be carefully selected, since the relationships and the quality of the contacts with these people will be of critical importance to the aides and for the success of the program. It is highly important that the persons selected be willing participants in the program and that they regard their work with prospective teachers as a professional responsibility. They should have demonstrated their teaching competence and understanding of basic principles and problems of learning and teaching, and be able to verbalize and make explicit their understandings clearly when working with the aide. It is expected that ordinarily the school principals will assume the major responsibility in selecting the cooperating teachers.

Since the purpose of the seminar is to help the aides integrate the theoretical knowledge acquired in the college classroom lectures with their practical experiences in the school classrooms, it is particularly important that seminar leaders not only have had considerable teaching experience, but that they also be thoroughly conversant with psychological principles and concepts. Adequate compensation should be given for the time spent.

Establishment of Working Relationships with the School Staffs

In initiating a teacher aide program careful orientation and briefing is needed, particularly since the similarities to already established student teaching programs may make for confusion. This can be accomplished by carefully prepared and fully attended orientation meetings where open discussion and criticism is encouraged and by follow-up individual conferences. It is extremely important that differences in expectancies of the college and school staffs be ironed out. Initial leadership in organizing orientation meetings and arranging for conferences will ordinarily be assumed by the college staff. Along these lines, the investigators of this project prepared a "Guide for Cooperating Teachers" which contained the objectives of the program, criteria for selecting teacher aide activities, suggested experiences a teacher aide might have, and other general information. Initiative and flexibility were encouraged on the part of the cooperating teachers in working with the aides. This guide was distributed and discussed at the first general orientation session at the beginning of the semester. While the seminar leaders may fairly readily learn of the aide's classroom experiences and observations in the seminar discussions, it is imperative that these seminar discussions be closely coordinated and tied in with the lecture materials. Seminar leaders should be apprised of the objectives of the course, receive copies of the text, course syllabi and outlines, and be fully informed of the content of the lectures on a current basis, particularly of the areas and topics receiving special emphasis. Frequent personal contacts with the college instructors should be encouraged and these instructors should be invited to visit and participate in the seminars whenever this is feasible. Cooperating teachers should also be invited to participate in the seminar discussions when this can be arranged. The stress in the seminars should be directed to the integration of theoretical materials with practical experiences, which means that seminar leaders are expected to be knowledgable in both areas. There appear to be some advantage of occasional rotation of seminar leaders among the various seminar groups, and for joint panel discussions.

Nature of the Aide's Learning Experiences

It is extremely important that the cooperating teacher have sufficient time to get to know the aide as a person, to explain and interpret what is happening in the classroom, to clarify the theoretical implications of her work, and to increase the aide's understanding and skills in the practical situation. This can be accomplished "in process" or by frequent individual conferences. Unless the cooperating teacher has the necessary free time to do this, she may feel imposed upon and harassed by the presence of an aide in her class. On the basis of the experience gained in this project, it is also recommended that only one aide be assigned to a cooperating teacher at any given time.

Because of the heavy college schedules and the requirement of a block of free time in which the aides could travel to the schools, spend time in the classroom and return, only two hours per week were allocated to class visits. The majority of the aides spent at least this amount of time in the same classroom, with the same cooperating teacher, observing the same subjects and children. Despite the overall favorable comments of the aides, the cooperating teachers, and the seminar leaders, it was generally agreed that this arrangement made for a rather limited and discontinuous experience. It is recommended, therefore, that aides have the opportunity to observe and participate over blocks of time long enough that they can appreciate the results of their own as well as the teacher's efforts.

In order that the aide receive the greatest benefits from such a program, his experiences should include a wide variety and range of students and activities. Criteria for selection of teacher aide activities are listed in the "Guide for Cooperating Teachers" which is found in Appendix C. The range of suggested activities can also be found in this guide and in the Interview Schedule. In addition to observation and participation in classroom activities, the aide should, if at all feasible, be given an opportunity to do some limited teaching in front of the class or with a group of children. Of course, his lack of experience and training is recognized, but the opportunity of feeling what it is actually like to teach was considered by many of the aides to be the high point in their experience. The cooperating teacher should make arrangements for the aides to work in a variety of classrooms and situations where the aide can observe and assist other teachers working with various subjects, equipment and with students of different abilities and backgrounds.

While the teacher aides in this project received a seminar hour, in lieu of a third hour of lecture, it is believed that the three hours of lectures per week are required as a minimum for adequate coverage of the large body of theoretical material comprising Educational Psychology.

Evaluation of the Aide's Progress and Growth

The evaluation of the teacher aide, as well as his guidance, should be the joint responsibility of the college instructor, the seminar leader, and the cooperating teacher. Much of this evaluation should be on an informal and continuous basis. In his discussions and conferences the aide will share in this evaluation process by comparing his own appraisal of classroom situations where he served as observer and participant with the appraisal of others.

Since a teacher aide program will probably be introduced rather early in the aide's college career, account must be taken of his maturity level, -- intellectual, physical, emotional, and social as well as the expectations and demands of the profession. In the case of some students, it would seem that vocational guidance and redirection would be in order, which in the long-run would be a service to the student as well as to the profession.

It is believed that a more formal evaluation is most helpful when it is done in a two-way conference, between the aide and the cooperating teacher, and the aide and the seminar leader, at least twice a semester. It is further recommended that the cooperating teachers and seminar leaders each submit summary statements of their evaluation to the college instructor. The latter can review these two statements with the aide along with other information at his disposal, such as the student's classroom work.

The teacher aide experience should not be regarded as a major test of the student's future competence as a teacher, but as a period of exploration and growth where the understanding of the various aspects of teaching will be enhanced and theory and practice can be better integrated. It is hoped that the aide will also get some idea of the kind of teaching situation, grades, and subjects he finds most congenial and interesting. As a valuable byproduct, the careful evaluation of the aide's work could help identify aspects of the program which should be improved and modified. The evaluation of the aide should contain constructive criticisms and definite suggestions, as well as identification of his apparent strengths and weaknesses. Since many college students are perhaps overly grade oriented, it is important that the basis for evaluation is clearly understood. The college instructor should assume the final responsibility for assigning an evaluative grade and for its interpretation.

Evaluation of the Cooperating Teachers and Seminar Leaders

In the present study no formal plan for evaluating the cooperating teachers and seminar leaders was devised. Since these key personnel play such an important role, it seems most desirable in future programs to evaluate the quality of their contribution to the program. It was recognized that in the present program not all of these people were equally enthusiastic, motivated, or effective. The sources of evaluatory information must necessarily be rather subjective in nature.

Corroborative information can be obtained by having the program director observe teachers and seminar leaders. Also, comments and annonymous reactions of the aides may be utilized.

Suggestions for Further Research

A review of the pertinent literature dealing with teacher aide programs revealed a dearth of carefully designed experimental studies of the evaluative type. In the present pilot study, while the investigators drew upon the limite information available in the literature, many details had to be worked out in relationship to the local circumstances. As has been noted earlier, much was learned while the program was in progress and it was possible to incorporate certain modifications almost immediately. Other changes, while perhaps desirable, would have required a drastic revamping of the program which was not possible. However, on the basis of the experience gained in the present study, some of the components of a "model" teacher aide program could be spelled out. Such a program urgently needs testing and evaluation on a broader scale.

In making such a study, a larger sample of subjects should be used and there should be follow-up, longitudinal study of the performance in subsequent courses of those students who have and who have not had prior teacher aide experiences. It would be of interest to determine whether the students who had the teacher aide experience approach and carry out their student teaching assig ments more effectively, with less anxiety and with greater assurance than do students who did not have such an experience.

Research in these areas requires further development and experimentation with tests which sensitively measure conceptual and attitudinal changes in students' development.

In several of the studies involving teacher aides who were not education majors, (college graduates, housewives, etc.) it was reported that a number of them developed an interest in teaching and subsequently enrolled in teacher training institutions. A perhaps tangential use of an existing teacher aide program would be to arrange for promising non-education majors and marginally interested or undecided students to participate in such a program and to determine whether a greater interest in a teaching career can be generated. Appropriate pre- and post-testing of these students would of course be required. In light of the continuing nationwide teacher shortage, the opportunity for these students to participate in these "dry runs" without penalty might serve as an effective recruitment technique.

CHAPTER V

SUMMARY

The study sought to determine the extent to which a Teacher Aide Program can make Educational Psychology a more useful course. The objectives of this course taught at Fairleigh Dickinson University were:

(1) To survey and critically analyze current psychological theories and principles relevant to teaching;

(2) To increase students' understanding of the many roles performed by teachers;

(3) To help students crystallize their commitment to a teaching career.

It was hoped that the results of this pilot study would give a clearer indication of the potential values of a more extensive research effort involving other kinds of laboratory experiences, offered in conjunction with professional courses such as Child Psychology, Adolescent Psychology, and methods courses.

The following questions were posed:

(1) Do students enrolled in experimental educational psychology sections learn better the psychological theories and principles relevant to teaching than do students enrolled in conventional educational psychology sections?

(2) Do students enrolled in experimental educational psychology sections increase their understanding of the many roles performed by teachers more than do students enrolled in conventional educational psychology sections?

(3) Do students enrolled in experimental educational psychology sections better crystallize their commitment to a teaching career than do students enrolled in conventional educational psychology sections?

The sample consisted of 124 subjects who took a sophomore course in Educational Psychology, a one-semester course required of all students in teacher training at Fairleigh Dickinson University. The subjects represented a cross-section of the socio-economic groups and of the public high schools graduates living in the New York Metropolitan area.

The sample was randomly distributed into six educational psychology sections Two instructors were assigned three sample sections: an experimental and two control sections. The following treatment was given each group:

Group	N	Treatment
Experimental	53	Students were given two hours of lectures per week for 15 weeks. They served two hours per week for 14 weeks as teacher aides in classrooms of the Teaneck public schools. One hour per week for 14 weeks, students participated in seminars conducted by experienced public school teachers and discussed their teacher aide experiences.
Control 1	39	Students were given two hours of lectures per week for 15 weeks. One hour per week for 14 weeks students participated in small group discussions led by their college instructors.
Control 2	32	Students were given three hours of lectures per week for 15 weeks.

The lecture topics and the order of their presentation were the same for all six sections. The same readings were assigned to all students.

Research instruments specially developed for this study included:

(1) Achievement Test in Educational Psychology (One form)

(2) Case Studies in Teaching - Forms A and B

(3) Student Questionnaire - Forms A and B

(4) Interview Schedule

(5) Rating Forms and Reactionnaires.

At the beginning of the spring semester 1964, all students were administered the Achievement Test in Educational Psychology, Case Studies in Teaching - Form A, and the Student Questionnaire - Form A. Toward the end of the spring semester 1964, the Achievement Test in Educational Psychology was readministered in addition to the Case Studies in Teaching - Form B and the Student Questionnaire Form B. At the mid-semester period as well as toward the end of the Teacher Aide Program, appropriate rating forms and reactionnaires were filled out by the 30 cooperating teachers and 7 seminar leaders. The teacher aides (students in Group E) completed a Mid-semester Evaluation of the Program form and the Interview Schedule which was used as a basis for post-program interviews.

The following major conclusions were drawn:

Students enrolled in experimental educational psychology sections, compared to students enrolled in conventional educational psychology sections:

(1) did not learn better the psychological theories and principles relevant to teaching,

(2) did not better crystallize their commitment to a teaching career,

(3) did not indicate a greater awareness of the varied duties and assignments which teachers have in addition to classroom instruction, but

(4) did demonstrate a greater understanding of the many roles performed by teachers.

The outcomes of certain auxiliary analyses as well as the perceptions of the program by the teacher aides, the cooperating teachers, and the seminar leaders were reported.

Limitations and implications of this study were discussed.

Teacher Aide Program, such as the one developed for this project, appears to make Educational Psychology a more useful course if the subjective comments and impressions of all participating personnel are considered. However, the program apparently did not fully serve its function if one examines the evidence derived from objective criteria which were applied in this study.

REFERENCES

American Association of Teachers Colleges. *School and community laboratory experiences in teacher education.* Oneonta: The Assn., 1948.

American Psychological Association. *Varieties of approach to the teaching of educational psychology.* Symposium sponsored by divisions 2 and 15 at the 70th annual convention, St. Louis, 1962.

Baller, W. R. The teaching of educational psychology: current practices and effective innovations in introductory courses. *J. educ. Psychol.*, 1952, *43* 3-8.

Beecher, G. Educational resources project. *School and Society*, 1957, *85*, 130-131.

Blair, G. M., Jones, S., and Simpson, R. H. *Educational Psychology* (2nd ed.) New York: Macmillan, 1963.

Bowen, J. J. Methods for better utilization of teachers' professional skills. *Element. Sch. J.*, 1956, *56*, 403-408.

Bradley, G. H. Survey of field experiences in institutions in AACTE. *J. ed. Res* 1959, *52*, 343-347.

Briggs, P. W. The Bay City experiment as viewed by the staff of the city schools. *J. teach. Educ.*, 1957, *8*, 3-6.

Bruce, W. F. Psychology functioning in the educating of teachers. *J. educ. Psychol.*, 1952, *43*, 92-100.

Burns, Constance M. et al. *Yale-Fairfield study of elementary teaching.* New Haven, Conn., 1956.

Cannon, W. E., and Skinner, R. C. Teaching educational psychology through direct experience. *J. educ. Psychol.*, 1949, *40*, 415-426.

Carrol, Lucille The Bay City experiment as seen by a classroom teacher. *J. teach. Educ.*, 1956, *7*, 142-147.

Carter, H. J. Improvement of teacher education at The City College. *J. teach. Educ.*, 1958, *9*, 45-50.

Charters, W. W., Jr. The social background of teaching. In N. L. Gage (Ed.) *Handbook of research on teaching.* Chicago: Rand McNally, 1963.

Chase, Francis S. The Bay City experiment as seen by an administrator of a teacher education institution. *J. teach. Educ.*, 1956, *7*, 132-136.

Conant, J. B. *The education of American teacher.* New York: McGraw-Hill, 1963.

Conyers, Caroline H. Is student teaching enough? *Peabody J. Educ.*, 1955, *32*, 237-241.

Cox, D. An objective and empirical study of the effects of laboratory experienc in a professional education course prior to student teaching. *J. exp. Educ* 1960, *29*, 89-94.

Cronbach, L. *Educational psychology* (2nd ed.) New York: Harcourt, Brace, and World, 1963.

Darrow, Harriet D. The effects of a participation program on the attitudes of prospective teachers at Indiana State Teachers College. *Teach. coll. J.*, 1959, *31*, 18-21.

Davis, D. Proposals for study and action, in *Teacher education and the public schools.* Fortieth Yearbook of the Association of Student Teaching (C. M. Clarke, Ed.), Dubuque, Iowa: W. C. Brown, 1961.

Fulton, W. R., and Rupiper, D. J. Observation of teaching: direct versus vicarious experiences. *J. teach. Educ.*, 1962, *13*, 157-164.

Gage, N. L. (Ed.) *Handbook of research on teaching.* Chicago: Rand McNally, 1963

Getzels, J. W. Educational psychology and teacher training. *El. Sch. J.*, 1952, *52*, 373-382.

Ginzberg, E. *et al.* *Occupational choice.* New York: Columbia University Press, 1951.

Havighurst, R. J., and Neugarten, B. L. *Society and education.* Boston: Allyn and Bacon, 1957.

Horrocks, J. E. The relationship between knowledge of human development and the ability to use such knowledge. *J. appl. Psychol.*, 1946, *30*, 501-508.

Horrocks, J. E. Methodology and the teaching of educational psychology. *J. educ, Psychol.*, 1951, *42*, 277-284.

Horrocks, J. E. An approach to teaching educational psychology. *J. educ. Psychol.*, 1952, *43*, 9-15.

Horrocks, J. E., Horrocks, W. B., and Troyer, M. E. *Instructors guide to case study tests in human growth and development.* Columbus, Ohio: Merrill Books 1960.

Hullfish, G. Uniting forces to improve education: teaching aides - an educational opportunity. *Educ. Lead.*, 1957, *14*, 381-383.

Hurst, J. G. *et al.* An approach to evaluation in educational psychology courses and its instrumentation. *Educ. psychol. Measmt*, 1961, *21*, 445-456.

Hurst, J. G. The relationship between teaching methods and course objectives in educational psychology. *J. educ. Res.*, 1963, *57*, 147-151.

Hymes, J. L. The Bay City experiment as seen by a child psychologist. *J. teach Educ.*, 1956, *7*, 121-131.

Jensen, B. T. Better teaching training. School and Society, 1957, 85, 398-399.

Klausmeier, H., and Swanson, D. The development of a functional course in educational psychology for teachers. J. educ. Psychol., 1950, 41, 449-472.

Koerner, J. D. The miseducation of American teachers. Boston: Houghton Mifflin, 1963.

Lang, G. Personality and professional characteristics of prospective elementary and secondary school teachers. New York: The City College, Educational Research Office, 1957 (mimeographed).

Lang, G. An experimental scale to measure motives for teaching. J. educ. Res., 1958, 51, 687-693.

Levine, Madeline S. Extending laboratory experience. Part I. J. teach. Educ., 1958, 9, 379-382.

Levine, Madeline S. Extending laboratory experiences. Part II. J. teach. Educ. 1961, 22, 29-35.

Lindgren, H. C. Educational Psychology in the classroom. (2nd ed.). New York: Wiley, 1962.

Lynch, W. W., Jr. Student differences in competency in educational psychology prior to formal training. J. educ. Psychol., 1954, 45, 110-120.

McCuskey, Dorothy The Bay City experiment as seen by a curriculum specialist. J. teach. Educ., 1956, 7, 111-118.

Miller, H. Role awareness as an objective of group work in teacher education. J. teach. Educ., 1955, 6, 128-133.

Mizer, E. Practice teaching for teacher trainees. Bull. natl. assoc. sec. sch. princ., 1962, 46, 269-276.

Murphy, Lois B. Teaching procedures in educational psychology. J. educ. Psychol., 1952, 43, 16-22.

National Education Association. Time devoted to school duties. Research Bull., 1962, 40, 83-88.

National Society of College Teachers of Education. Educational psychology in the education of teachers. J. educ. Psychol., 1949, 40, 257-294.

National Society of College Teachers of Education. Educational Psychology for teachers. J. educ. Psychol., 1950, 41, 321-372.

National Society of College Teachers of Education. Committee of Educational Psychology. Educational Psychology in teacher education. Washington, D.C.: The Assn, 1953.

Odland, Norine The student participation program at the University of Minnesota *J. teach. Educ.*, 1961, *12*, 377-380.

Park, C. B. The Bay City experiment as seen by the director. *J. teach. Educ.*, 1956, *7*, 101-110.

Rast, G. E. The Bay City experiment as seen by a school administrator. *J. teach Educ.*, 1956, *7*, 119-125.

Redl, F., and Wattenberg, W. M. *Mental hygiene in teaching* (2nd ed.). New York: Harcourt, Brace Co., 1959.

Rivlin, H. N. The teaching of educational psychology. *J. educ. Psychol.*, 1952, *43*, 23-31.

Stiles, L. J. (Ed.) *The teacher's role in American society.* New York: Harper, 1957.

Stone, D. R. A four-phase learning project in teaching educational psychology. *J. educ. Psychol.*, 1951, *42*, 301-307.

Super, D. E. A theory of vocational development. *Amer. Psychologist*, 1953, *8*, 185-190.

Symonds, P. M. *What education has to learn from psychology.* (3rd ed.). New York: Bureau of Publications, Teachers College, Columbia University, 1961.

Trump, J. L. A future setting for teacher education. *J. teach. Educ.*, 1962, *13*, 19-23.

Williams, C., Deever, R. M., and Flynn, E. B. Professional laboratory experience in Oklahoma. *J. teach. Educ.*, 1960, *11*, 497-505.

Zirbes, L. *Teachers for today's schools.* Washington, D. C.: National Education Association. The Association for Supervision and Curriculum Development, 1951.

APPENDIX A

TABLE 36

Mid-semester Evaluation of Teacher Aide Program by Teacher Aides (N = 53)

Section I-B: Experiences and Activities Found to be Particularly Valuable

Experience and Activity	N
Observing various class activities	19
Working with individual students	16
Teaching groups of children or entire class	14
Discussions with cooperating teachers	7
Tutoring individual students	7
Marking papers	4
Preparing tests	2
Discussions with other school personnel and specialists	2
Observing individual differences in students	2
Proctoring a class	2
Observing differences in classes	1
Attending meetings of teachers	1
Preparing a stencil	1
Preparing teaching materials	1
Reviewing test results with class	1
Administering a test	1
Speaking with children	1
Examining lesson plans and other instructional materials	1

Section I-C: Experiences and Activities Found not to be Particularly Valuable

Experience and Activity	N
Observation (excessive)	17
Activities of routine nature	15
Repetitive experiences	7
Homework assigned by cooperating teacher	3

(Table continued on next page)

TABLE 36 (continued)

Section I-D: Suggestions for Additional Experiences and Activities

Comment	N
Aides should do more actual teaching	13
More direct contact and working with children	9
Provide a greater variety of experiences and subjects	8
More tutoring of children	8
Arrange for observing other classes	5
Arrange for observing other cooperating teachers and specialists	4
Less observation, provide for more participation	4
Aides should prepare lessons	3
School visits should be at different times	2
Aides should spend a whole day at school at a time	2
Aides should observe a child and prepare a case study	1
Should have field trips	1
Aides should receive college credits for participation in program	1
More discussions with cooperating teachers	1
Aides should prepare, mark, and discuss tests with children	1
Aides should see the cooperating teacher's lesson plans	1
Aides should observe extra-curricular activities	1
Aides should participate in curriculum planning	1

Section II-A: Comments Regarding Realization of Objectives of Seminars

Comment	N
Seminars helpful in allowing for discussion and sharing of experiences	35
Seminars helpful in integrating theory with practice	26

(Table continued on next page)

TABLE 36 (continued)

Section II-B: Comments Regarding Non-Realization of Objectives of Seminars

Comment	N
Theory and teacher aide activities not integrated.	16
Insufficient participation, too seminar leader centered.	6
Aides do not have sufficient experiences to share.	4
Discussions not concrete enough.	3
Seminars are a waste of time	2
Seminars just a "rehash" of aide experiences	2
Discussions are forced	2
Aides are not treated as college students.	2
Seminars are not practical enough.	1
Seminar leader not candid enough about the school system	1
Seminar leader is too idealistic	1
More discussion of experiences is needed	1
Examples cited are too extreme	1
Atmosphere of the seminars not good.	1
Too many juniors in the seminar class.	1
Seminars lack vitality and sustained interest.	1
No help at all	1

Section II-C: Suggestions to Improve Seminars

Comment	N
More participation of aides should be encouraged	3
Seminars should be led by cooperating teachers	1
Less extreme examples should be discussed.	1
More concrete examples and cases should be discussed	1
Seminar leaders should be rotated or alternated.	1
Hold fewer seminars, with more students.	1

(Table continued on next page)

TABLE 36 (continued)

Section III-A: Critical Comments Regarding Lectures

Comment	N
Lack of integration of theory and practice	8
Lectures are too theoretical	7
Insufficient number of lecture hours	3
Lack of integration of text and lectures	3
Class too noisy	2
Lectures lack content	2
Lectures stress elementary school too much	1
Lecturer offers too many personal opinions	1
Lecturer "over-explains"	1
Too much outside reading assigned	1
Lectures are "too statistical"	1
Lectures are too condensed	1
Lectures not coordinated with the seminars	1

Section III-B: Suggestions to Improve Lectures

Comment	N
Relate lectures more closely to experience and practice	11
Provide more lecture hours	6
Should lecture more on text materials	6
Illustrate lecture materials with more case studies, more concrete examples	5
Cover less materials, but more thoroughly	3
More discussion in class	3
Use more films	2
Classes should be even more informal	1
Cover more ground in a shorter period	1
Elementary and secondary students should receive separate lectures	1
Cover materials not covered in the text	1
Text and lecture materials should be coordinated more	1

(Table continued on next page)

TABLE 36 (continued)

Section IV: General Comments Regarding the Teacher Aide Program

Comment	N
More participation by aide in classroom teaching activities is needed.	7
Arrange for observation of varied classes, grades, subjects and cooperating teachers.	6
More time should be devoted to teacher aide activities	5
Expand the course, give additional college credits to aides.	3
Better preparation and orientation of cooperating teachers is needed.	3
Provide additional lecture hours	2
More integration of theory and practice in lectures and seminars.	2
Make the Teacher Aide Program a separate course.	1
Arrange for more direct contact with children.	1
Prepare aides better in subject matter taught in public school classes.	1
Visits to schools should be concentrated rather than once per week.	1
Increase number of seminar sessions.	1
Eliminate the seminar sessions	1
Aides should do less routine tasks	1
Aides should receive financial compensation for their work	1
Aide program should be started in the freshman year.	1

TABLE 37

Number of Elementary School Teacher Aides Who Had Certain Types of Experiences and an Assessment of These Experiences (N = 36)

Type of Experience	N	Assessment by Teacher Aides Especially Valuable	Valuable	Not Valuable
I - OBSERVATION				
A. Classroom	36	20	10	6
B. School Plant				
Playground	24	2	18	4
Gym	24	1	20	3
Cafeteria	2	0	1	1
Library	19	4	12	3
Guidance-Counseling Office	3	0	2	1
Nurse's Office	11	0	7	4
Administrative offices	20	1	12	7
Audio-visual room	5	1	3	1
Study hall	2	0	1	1
Faculty dining room	4	0	3	1
Faculty lounge	17	1	8	8
Auditorium	22	3	14	5
C. Laboratories	0	0	0	0
D. Assemblies and other special programs	13	6	6	1
E. Film showings	15	6	8	1
F. Co- and extra-curricular activities	17	11	6	0

(Table continued on next page)

TABLE 37 (continued)

	Type of Experience	N	Assessment by Teacher Aides Especially Valuable	Valuable	Not Valuable
	II - TEACHING				
A.	"In front of class"	21	20	1	0
B.	Part of a class or group of children	26	26	0	0
C.	Working with individual children (Indicate if with children with special problems or characteristics)____________________	36	34	2	0
	III - EXAMINING INSTRUCTIONAL MATERIALS, RECORDS, EQUIPMENT, ETC.				
A.	Lesson plans	15	9	6	0
B.	Teacher guides and manuals	28	16	12	0
C.	Student guides and manuals	14	3	11	0
D.	Teacher grade books	12	4	6	2
E.	Report cards	13	4	9	0
F.	Textbooks	32	10	22	0
G.	Workbooks	33	15	17	1
H.	Displays	31	13	18	0
I.	Class library	25	9	15	1
J.	Models	15	2	13	0
K.	Audiovisual equipment	16	8	6	2
L.	Student records	12	7	5	0
M.	Copies of standardized tests	17	9	8	0
N.	Copies of teacher-made tests	20	8	12	0
O.	Student compositions and other classwork	6	3	3	0
P.	Various instructional materials	4	0	4	0

(Table continued on next page)

TABLE 37 (continued)

Type of Experience	N	Assessment by Teacher Aides Especially Valuable	Valuable	Not Valuable
IV - ACTIVITIES RELATED TO TEACHING				
A. Prepare tests	6	2	3	1
B. Correct tests	31	9	19	3
C. Correct homework and classwork	24	11	13	0
D. Record grades	10	4	4	2
E. Plan lesson	8	7	1	0
F. Look up records	4	2	2	0
G. Take attendance	2	0	2	0
H. Operate audio-visual equipment	7	4	2	1
I. Take book inventory	15	1	6	8
J. Prepare bulletin board	13	4	6	3
K. Decorate classroom	14	3	7	4
L. Set up displays	11	2	6	3
M. Prepare deficiency reports	0	0	0	0
N. Operate ditto and mimeograph machines	11	4	6	1
O. Prepare (type) stencils	10	2	6	2
P. Prepare flash cards	3	0	2	1
Q. Assist in Library	3	0	2	1
R. Assist in laboratory	1	1	0	0
S. Serve as monitor (cafeteria, hall)	2	1	1	0
T. Order supplies	3	1	2	0
U. Assist in preparation for assembly and other programs	10	4	5	1

(Table continued on next page)

TABLE 37 (continued)

Type of Experience	N	Assessment by Teacher Aides Especially Valuable	Valuable	Not Valuable
V.- CONFERENCES AND DISCUSSIONS				
With:				
A. Cooperating teacher	34	32	1	1
B. School administrators	20	12	7	1
C. Curriculum specialists	6	4	1	1
D. Guidance counselors	2	1	1	0
E. Other teachers	14	8	6	0
F. Students (informal)	30	19	11	0

TABLE 38

Number of Secondary School Teacher Aides Who Had
Certain Types of Experiences and an Assessment of These Experiences
(N = 17)

Type of Experience	N	Assessment by Teacher Aides Especially Valuable	Valuable	Not Valuable
I - OBSERVATION				
A. Classroom	17	10	6	1
B. School Plant				
Playground	2	0	2	0
Gym	6	0	2	4
Cafeteria	11	1	7	3
Library	11	5	5	1
Guidance-Counseling office	10	5	5	0
Nurse's office	5	0	5	0
Administrative offices	13	4	8	1
Audio-visual room	7	4	3	0
Study hall	9	1	5	3
Faculty dining room	13	3	7	3
Faculty lounge	10	5	4	1
Auditorium	10	1	6	3
C. Laboratories	3	1	2	0
D. Assemblies and other special programs	4	0	4	0
E. Film showings	7	5	2	0
F. Co- and extra-curricular activities	1	1	0	0

(Table continued on next page)

TABLE 38 (continued)

Type of Experience	N	Assessment by Teacher Aides Especially Valuable	Valuable	Not Valuable
II - TEACHING				
A. "In front of class"	10	10	0	0
B. Part of a class or group of children	7	6	1	0
C. Working with individual children (Indicate if with children with special problems or characteristics)________	14	11	3	0
III - EXAMINING INSTRUCTIONAL MATERIALS, RECORDS, EQUIPMENT, ETC.				
A. Lesson plans	9	8	1	0
B. Teacher guides and manuals	7	5	2	0
C. Student guides and manuals	4	3	1	0
D. Teacher grade books	14	7	7	0
E. Report cards	6	4	1	1
F. Textbooks	17	9	8	0
G. Workbooks	4	3	0	1
H. Displays	13	4	8	1
I. Class library	4	1	3	0
J. Models	5	1	3	1
K. Audiovisual equipment	10	6	3	1
L. Student records	8	4	3	1
M. Copies of standardized tests	5	3	2	0
N. Copies of teacher-made tests	15	11	4	0
O. Supply orders	2	0	2	0
P. Laboratory equipment	3	2	1	0

(Table continued on next page)

TABLE 38 (continued)

Type of Experience	N	Assessment by Teacher Aides Especially Valuable	Valuable	Not Valuable
IV - ACTIVITIES RELATED TO TEACHING				
A. Prepare tests	8	7	1	0
B. Correct tests	12	9	3	0
C. Correct homework and classwork	9	3	5	1
D. Record grades	11	5	4	2
E. Plan lesson	7	7	0	0
F. Look up records	5	1	3	1
G. Take attendance	3	1	2	0
H. Operate audio-visual equipment	3	1	2	0
I. Take book inventory	0	0	0	0
J. Prepare bulletin board	0	0	0	0
K. Decorate classroom	0	0	0	0
L. Set up displays	0	0	0	0
M. Prepare deficiency reports	2	0	1	1
N. Operate ditto and mimeograph machines	7	3	3	1
O. Prepare (type) stencils	7	3	2	2
P. Prepare flash cards	0	0	0	0
Q. Assist in library	1	0	1	0
R. Assist in laboratory	5	3	2	0
S. Serve as monitor (cafeteria, hall)	0	0	0	0
T. Order supplies	0	0	0	0
U. Assist in preparation for assembly and other programs	0	0	0	0

(Table continued on next page)

TABLE 38 (continued)

		Assessment by Teacher Aides		
Type of Experience	N	Especially Valuable	Valuable	Not Valuable
V - CONFERENCES AND DISCUSSIONS				
With:				
A. Cooperating teacher	16	15	1	0
B. School administrators	9	3	5	1
C. Curriculum specialists	10	6	3	1
D. Guidance counselors	8	3	4	1
E. Other teachers	11	9	2	0
F. Students (informal)	14	9	5	0
G. Librarian	4	3	1	0

TABLE 39

Teacher Aides' Responses to Interview Schedule
(ETA: N = 36; STA: N = 17; Total N = 53)

Section IIIa: Overall Assessment of Teacher Aides' Experiences: Positive Comments

Comment	Total	ETA	STA
Good experience	22	13	9
Gave new perspective; theory and practice more realistic	21	17	4
Made for more positive attitude towards choosing teaching as profession	7	6	1
Learned what to expect in the future	7	7	0
Good to have this experience this early	7	7	0
Became aware of problems faced by teachers	6	4	2
More acquainted with teacher techniques	4	3	1
Got the feel of teaching	4	1	3
Learned children's impressions	3	3	0
Cooperating teacher put aide at ease and was friendly	3	2	1
Enjoyable experience	2	2	0
Observed how teacher should conduct herself	2	2	0
Learned what not to expect	2	2	0
Observed different teachers' methods and effect on same class	2	2	0
Prepared aides for student teaching	2	2	0
Learned new things about the profession	2	2	0
Better insight into selves and students	2	2	0
Learned various roles of teachers	2	0	2
Well planned program	1	1	0
Mutual cooperation	1	1	0
Opportunity to associate with different individuals in teaching	1	1	0
Observed teacher-pupil interaction	1	1	0
Cooperating teachers gave new ideas to teacher aide	1	1	0
School was beautiful	1	1	0
Built up confidence in ability to become a teacher	1	0	1
Early experience gave aide a chance to change mind	1	0	1
Learned why teachers do what they do, about their attitudes towards children	1	0	1
Learned how to handle problems	1	1	0
Given an opportunity to teach	1	1	0
Established good relationships with students	1	1	0
Realized great strides made in education	1	1	0
Enjoyed working with cooperating teacher	1	1	0
Overall view of school plant attained	1	0	1
Could be developed into a worthwhile program	1	0	1
Learned how to plan a lesson and other classroom duties	1	0	1
Saw rewards of being a teacher	1	0	1

(Table continued on next page)

TABLE 39 (continued)

Section IIIb: Overall Assessment of Teacher Aide Program: Negative Comments

Comment	Total	ETA	STA
Lack of variety. Observed and did same things all the time	15	13	2
Too much time spent observing and not enough participation	9	8	1
Program too short.	9	8	1
Not able to observe other classes.	5	5	0
Not enough opportunities to teach.	5	4	1
Not enough continuity to the program	5	1	4
Aides should have been in schools more than once a week.	4	3	1
Insufficient correspondence between lecture materials and observations	4	2	2
Cooperating teacher did not discuss activities with aides.	3	3	0
Too much preparation required of aides in program.	2	2	0
Required to do too many errands and "busy work" for cooperating teachers	2	2	0
Cooperating teacher not too interested in the program.	2	2	0
Not all the seminar sessions were valuable	2	0	2
Insufficient time for discussion with seminar leaders.	2	2	0
Cooperating teacher should have a list of activities to follow.	2	2	0
Cooperating teacher misunderstood the purpose of having a teacher aide in the classroom.	2	2	0
Not enough lecture material covered.	1	1	0
Aides should have visited more than one school	1	1	0
Not given opportunity to compare techniques of various teachers	1	1	0
No discussions with other cooperating teachers	1	0	1
Not prepared to take full advantage of the experience.	1	0	1
Not given sufficient understanding of the program and its potentials	1	1	0
Experience too limited	1	1	0
A junior practicum would have been more practical.	1	0	1
Unable to observe heterogeneous classes.	1	0	1
Too many "teachers" for a small classroom (cooperating teacher and two aides)	1	1	0
Unable to deal directly with children at first	1	1	0
Program too undefined.	1	1	0
Cooperating teachers should participate in the seminars.	1	1	0
Many problems still have to be ironed out.	1	1	0
Not able to see follow through of a lesson	1	0	1
No contacts with students.	1	0	1
No knowledge of the workings of school administration and its relationships with teachers.	1	0	1
Program required too much time of aides.	1	0	1

(Table continued on next page)

TABLE 39 (continued)

Section IVa: Seminars: Positive Comments

Comment	N
Beneficial to discuss experiences.	9
Classroom observations were related to theory.	8
Provided an opportunity to compare and discuss experiences with other aides.	6
Informality was good	6
Interesting and valuable discussions	5
Seminars were worthwhile	4
Gave insights into problems of teachers and students	4
Learned about the Teaneck Schools' program	3
Chance to discuss and resolve professional problems.	3
Learned in the seminars about teaching and how to handle situations.	3
Provided good opportunity to have questions answered and problems solved	2
Seminars were lively	2
Seminar group was motivated.	2
Liked the seminar idea in general.	2
Learned what was actually happening in schools	1
Classroom observations were clarified.	1
Learned what to look for in classes.	1
Discussed the many roles of teachers	1
Seminar promoted interest and cooperation.	1
Teaching techniques were explained	1
Bridged the gap between theory and practice.	1
Profited greatly from the seminars	1
Covered a wide variety of topics	1
Extra reading materials were provided the aides.	1
All points raised were explained	1
Good to have differences of opinion.	1
Aides were treated like future teachers.	1
New methods were explained	1
Learned what is expected of teachers	1
Chance to speak to administrative personnel.	1
Enjoyed seminars with combined groups.	1
Opportunity to discuss methods learned in lectures with expert	1
The preplanned seminar discussions were good	1
Liked the small and personal groups.	1
Chance to escape from the "talk, talk" of the elementary schools	1
Learned a great deal	1
Explained some of the functions of the high school	1
Tried to relate textbook to experiences.	1
Explained what makes a good teacher.	1

(Table continued on next page)

TABLE 39 (continued)

Section IVb: Seminars: Negative Comments

Comment	N
More discussion should have been allowed by seminar leaders.	8
Seminar sessions did not relate principles of educational psychology	3
Insufficient seminar time.	3
Personality conflicts with seminar leaders	3
Seminar leader close-minded, saw only positive aspects of teaching	3
Seminar discussions were dull and uninteresting.	3
Aides should have been allowed to conduct the seminars	3
Seminar leader gave no directions until last few meetings.	3
Joint discussions with fewer seminar leaders would have been better.	2
Seminars should have had aides from different schools and different observations	2
Insufficient discussions of experiences.	2
Discussions were too formal.	2
Lecture and textbook materials not tied together	1
Observed and discussed same things every week.	1
Not enough discussion of theory.	1
More emphasis was needed on relating text theories to practice	1
Seminar leaders should have been rotated to give different aspects of teaching	1
Seminars were uninteresting; the class situation not handled well.	1
Seminars could have been more organized.	1
Seminar leader should have discussed a certain aspect of teaching and related it to what was observed by aides	1
Educational psychology principles not discussed enough	1
Seminar leader went off on tangents.	1
Seminars could have been made more interesting	1
Seminar leaders should have given summaries of the sessions.	1
Seminars were not meaningful	1
Seminar leaders questions were too obscure and difficult	1
Aides should have been able to observe and participate in other seminars directed by other seminar leaders.	1
Seminars were conducted like an interview.	1
More time should have been spent with the cooperating teachers	1
Seminar leader competed with aides for the floor	1
The class was held back and lost enthusiasm.	1
Nothing was tied together.	1
Did not accomplish what it was supposed to do.	1
Seminars did not deal with certain important areas of teaching, e.g., cheating, discipline	1
Aides should have been exposed to other cooperating teachers and seminar leaders to get other points of view.	1
Questions never answered, only asked	1
Students not permitted to choose topics.	1
Deviations from main topic to specific areas lacking in interest	1

(Table continued on next page)

TABLE 39 (continued)

Section VIa: Specific Criticisms of the Teacher Aide Program

Criticism	Total	ETA	STA
Lack of flexibility in observation assignments	14	13	1
Both cooperating teachers and aides were unsure regarding what they were supposed to be doing.	12	7	5
Lack of continuity because of time arrangements; difficult to accomplish anything	10	3	7
Too much observation	8	7	1
Spent all the time with one teacher and one subject. . . .	7	6	1
Too many menial duties to perform.	7	5	2
Not allowed to teach enough.	7	6	1
Too much time taken up by program.	6	1	5
Lack of congruence between theory and practice	6	3	3
Insufficient lecture time.	5	3	2
Not enough participation in classrooms	5	2	3
Insufficient contact with children	4	4	0
Aide had to visit school at same time each week.	3	3	0
Saw same subject each week	3	3	0
Did not get extra credit for extra time spent in program .	2	1	1
Insufficient time spent in classrooms.	2	2	0
Not enough discussion in the seminars.	2	0	2
Seminar leaders poorly chosen.	2	0	2
No solutions to problems discussed in seminars	2	1	1
Sophomores not prepared to do teaching that aide would like to do	1	1	0
Not provided with a well rounded picture of teaching day .	1	1	0
Seminar not of sufficient value.	1	1	0
Too many questionnaires to answer.	1	1	0
Lectures too oriented towards the elementary schools . . .	1	1	0
No practical knowledge of teaching as a profession provided	1	0	1
Experiences of aides were not standardized; too much variety	1	0	1
Not as applicable for secondary schools as for elementary.	1	0	1
Not all the seminar sessions were valuable	1	0	1
Cooperating teacher did not offer enough information . . .	1	1	0
Lectures geared to theory, not practice of teaching. . . .	1	1	0
Too much time spent in one school.	1	1	0
Seminars did not meet enough	1	1	0
Educational psychology should not be centered on theory only	1	1	0
Too much time spent on lectures.	1	1	0
Not enough time to become acquainted with the school systems.	1	0	1
Structure of the program was undefined	1	0	1
No concrete answers given to problems.	1	0	1

(Table continued on next page)

TABLE 39 (continued)

Criticism	Total	ETA	STA
Program was not long enough.	1	0	1
No integration of lecture, seminar, and classroom experiences.	1	0	1
Felt like an outsider in the classroom; did not know the teacher's plans.	1	0	1

Section VIb: Specific Suggestions for Improving the Teacher Aide Program

Suggestion	Total	ETA	STA
Aides should observe more than one teacher, grade and/or class.	32	27	5
Visit schools at different times	10	10	0
Aides should engage in a variety of classroom experiences.	9	6	3
Cooperating teachers should be better informed about the purposes of the program.	9	5	4
More time devoted to both lecture and teacher aide experiences.	8	6	2
Have aides prepare and give a lesson to children	8	8	0
Credit should be given to aides for working in the program	8	7	1
Spend a whole day each time instead of the same two-hour period	7	2	5
Alternate seminar leaders.	7	4	3
More direct contacts with children	6	6	0
Teachers should be provided with list of activities for aides.	6	1	5
Make the aide program a credit course.	5	3	2
Aides should be in school for a longer period rather than one day, 2 hours per week.	5	2	3
Advance planning in the beginning of the program for the things the aides will be doing in the classrooms	5	4	1
Cooperating teachers should participate in combined seminars	5	1	4
Aides should observe more than one school or system.	4	3	1
Less time devoted to seminars.	4	3	1
More time devoted to seminars.	4	2	2
Better orientation of the aides with respect to what they should be observing	4	1	3
More specific teaching activities should be provided	3	3	0
Aides should be given more opportunities to discuss problems with cooperating teachers	3	2	1

(Table continued on next page)

TABLE 39 (continued)

Suggestion	Total	ETA	STA
More opportunities to meet with administrative personnel of schools	2	2	0
More time spent in classes as a teacher aide	2	2	0
Less time spent in just observation.	2	2	0
Half of aides' work should be based on practical work. . .	2	2	0
Aides should have meaningful tasks and not be concerned with menial tasks.	2	1	1
Seminars should be held on same day as school visits so that experiences will be fresh	2	2	0
Aides should have a tour of the entire school in the beginning.	2	2	0
Program should cover less, but be more intensive in what is covered	2	1	1
Cooperating teachers should be used as seminar leaders . .	2	1	1
No more than one aide per class.	2	2	0
Start the program in the freshman year	2	1	1
Aides should do individual case studies of children. . . .	1	1	0
See different teachers teaching at the same grade level. .	1	1	0
Structure program so that aides get more responsibilities.	1	1	0
Combine several two-hour visits.	1	1	0
Set up program with two-hour seminar, two-hour observation, and one-hour lecture	1	1	0
Grades and evaluations should be left to instructor's judgment	1	1	0
Select only interested cooperating teachers after they know what is involved in an aide program	1	1	0
Eliminate all outside readings	1	1	0
More varied observation of the use of audio-visual aides .	1	1	0
Prior preparation for subjects being taught in schools . .	1	1	0
Continuation of the program urged.	1	1	0
Better selection of classes used for observations.	1	1	0
Lectures should be more related to the observations. . . .	1	1	0
Seminars should be improved.	1	0	1
Less theory, more practice	1	0	1
Elementary and secondary students should attend separate lectures	1	0	1
Closer relations between cooperating teacher and program .	1	0	1
Cooperating teacher should provide information about each child to help aides correlate psychological principles to teaching.	1	0	1
Lectures should be more congruent with the rest of the program.	1	1	0
Aides should meet all the people participating in the program.	1	1	0

(Table continued on next page)

TABLE 39 (continued)

Suggestion	Total	ETA	STA
All people involved, including aides and cooperating teachers, should meet during the summer and work out aims and objectives.	1	1	0
Lectures to include case studies centered around practical problems of teaching	1	1	0
Aide program should be required part of education curriculum.	1	1	0
Aides should attend curriculum planning meetings in the schools.	1	0	1
Better integration of theory and observations.	1	0	1
Have observations in school first, then lectures and seminars	1	0	1

TABLE 40

Responses of Cooperating Teachers to Teacher Aide Rating Form CT
(N = 30)

Section 2: Constructive Contributions of Teacher Aides

Contribution	N
Correct and mark homework and teaching materials	25
Arrange classrooms and laboratories.	23
Assist in the teaching of entire class	21
Prepare, administer, and/or correct tests.	19
Assist in the teaching of individual students.	18
Prepare teaching materials	17
Tutor individual students.	15
Assist in the teaching of groups of students	13
Maintain records and reports (clerical duties)	9
Assist in the preparation of assemblies.	6
Monitorial duties.	1
Assist in preparation for PTA programs	1

Section 3: Comments Regarding Non-constructive Contributions

Comment	N
Contribution of teacher aide limited because of lack of time for guidance and explanations.	5
The need to take time out from classroom teaching for explanations	2
Teacher aides' just observing represents no contribution	1

Section 7a: Criticisms of the Program

Criticism	N
Lack of continuity in teacher aides' work with children.	9
Awkward time scheduling.	6
Lack of specific direction for both teacher aides and cooperating teachers	4
Cooperating teachers cannot take time out from class to give detailed instructions	3
Heavy college program makes teacher aide program too heavy for students.	2

(Table continued on next page)

TABLE 40 (continued)

Criticism	N
Teacher aides' experience too limited to carry out teaching tasks.	2
Teacher aides see same subject each visitation	2
Public school and university holidays not coordinated.	2
Teacher aides are poorly prepared.	2
Expectations for cooperating teachers not realistic.	1
Program takes away valuable class time	1
More suitable for elementary school than for secondary school.	1
Curriculum presentation and order must be changed to accommodate aides . .	1
Aides come in and leave while classes are in session	1
Finding suitable work for aides is more work than help for cooperating teacher.	1
Program cannot really be called a "teacher-aide" program	1
Aides are in the classroom for too brief a time.	1
Students display negative attitude towards routine activities.	1
Difficult to arrange a constructive program for aides in advance	1
Teacher aide experience is too protracted.	1

Section 7b: Suggestions for Improving the Program

Suggestion	N
Aides should come into schools for a longer time period per visit and visits to be more concentrated within fewer weeks.	5
Aides need more time in the classrooms	4
Aides need better preparatory training for the program	3
Time to be set aside for discussions between aide and cooperating teacher.	2
Aides need penmanship training for board work and for preparing materials.	2
Cooperating teacher should have more background information regarding aides.	1
Cooperating teachers should be invited to sit in the seminars.	1
Aides should have observation experience before and after the teacher aide program in a local school system.	1
Teacher aide program should be shortened to 4-5 sessions of 2 hours each involving just observation	1
Cooperating teachers should receive credits or some other form of compensation for their work	1
Lengthen junior or senior practicum in place of the program.	1
Aides should meet with a group of cooperating teachers	1
Aides need more awareness of the problems involved in teaching	1
Aides should be willing to do work at home in preparation for visitation .	1
Program should be started earlier in the student's college career.	1
Aide should be phoned ahead of the time of her visitation to anticipate what will be happening in the next class	1

(Table continued on next page)

TABLE 40 (continued)

Suggestion	N
Less exposure to many classes and a concentration on just one grade.	1
More staggered time schedules for the aides.	1
Teach student how to operate the ditto machine in advance.	1
Cooperating teacher should not have to evaluate aides.	1
Program should be more structured for the cooperating teachers	1

TABLE 41

Background Characteristics of Subjects

A. Age Distributions of Subjects

Treatment Group	N	Years 18	19	20	21	22	23 plus
C1	39	12.8%	35.9%	28.2%	17.9%	2.6%	2.6%
C2	32	3.1	21.9	25.0	15.6	3.1	31.3
E	53	11.3	56.6	15.1	3.8	3.8	9.4

B. College Status of Subjects

Treatment Group	N	Status Freshmen	Sophomores	Juniors	Seniors
C1	39	2.6%	43.6%	33.3%	20.5%
C2	32	0.0	43.8	34.4	21.9
E	53	0.0	62.3	30.2	7.5

C. Psychology Courses Previously Taken by Subjects

Treatment Group	N	Number of Three-Credit Courses 0	1	2	3	4 plus
C1	39	0.0%	2.6%	51.3%	33.3%	12.9%
C2	32	0.0	9.4	65.6	9.4	15.6
E	53	1.9	7.5	75.5	13.2	1.9

(Table continued on next page)

TABLE 41 (continued)

D. Psychology Courses Currently Taken by Subjects

Treatment Group	N	Number of Three-Credit Courses 0	1	2 plus
C1	39	89.7%	2.6%	7.8%
C2	32	93.8	6.3	0
E	53	88.7	11.3	0

E. Education Courses Previously Taken by Subjects

Treatment Group	N	Number of Three-Credit Courses					
		0	1	2	3	4	5 plus
C1	39	48.7%	20.5%	5.1%	12.8%	0	12.8%
C2	32	43.8	34.4	0	6.3	3.1	12.5
E	53	62.3	17.0	3.8	3.8	9.4	3.8

F. Education Courses Currently Taken by Subjects

Treatment Group	N	Number of Three-Credit Courses 0	1	2 plus
C1	39	41.0%	41.0%	17.9%
C2	32	46.9	34.4	18.7
E	53	54.7	17.0	28.3

(Table continued on next page)

TABLE 41 (continued)

G. Teaching-related Experiences of Subjects

Treatment Group	N	Type of Experience[a] 0	1	2	3	4	5	6	7	8
C1	39	33.3%	2.6%	0	0	2.6%	23.1%	7.7%	25.6%	5.1%
C2	32	50.0	0	3.1	6.3	6.3	6.3	6.3	12.5	9.4
E	53	37.7	7.5	3.8	1.9	0	20.8	3.8	20.8	3.8

[a] Code for type of experience:

0 - none
1 - tutoring
2 - Sunday school teaching
3 - weekday school teaching
4 - observation
5 - camp counselling
6 - other (scouting, volunteer in hospital)
7 - two combinations of above
8 - three combinations of above

APPENDIX B

Research Instruments and Forms Used

- Achievement Test in Educational Psychology
- Case Studies in Teaching - Form A
- Case Studies in Teaching - Form B
- Selected Principles of Educational Psychology
- Student Questionnaire - Form A
- Student Questionnaire - Form B
- Midsemester Evaluation of Program by Teacher Aides
- Interview Schedule
- Teacher Aide Rating Form CT
- Teacher Aide Rating Form SL-M
- Teacher Aide Rating Form SL-E
- Seminar Reactionnaire SL-M
- Seminar Reactionnaire SL-E
- Letter to Cooperating Teachers
- Letter to Seminar Leaders
- Letter to Dr. Scribner

Form [illegible]-1

Achievement Test in Educational Psychology

Select the one best alternative which completes the statement. Your score is the number of questions answered correctly. Record your answers on the answer sheet.

DO NOT MARK UP THIS BOOKLET.

1. The first step toward increased understanding of a child's behavior occurs when we ask ourselves:

    (1) "What caused him to behave that way?"
    (2) "What can we do about his misbehavior?"
    (3) "Was his behavior normal?"
    (4) "Who is responsible for his behaving the way he did?"

2. When psychologists refer to the "maturity" of a child's behavior, they are using the term to:

    (1) describe the child's self-concept.
    (2) refer primarily to his sexual development.
    (3) describe the extent to which his behavior comes up to the expectations of adults.
    (4) indicate the extent to which he displays behavior appropriate to his age.

3. Which one of the following assumptions is not made by teachers who think of learning as a process of accumulating knowledge?

    (1) knowledge is something that has existed in its own right for a long time.
    (2) the best way to learn facts is to memorize them.
    (3) unless facts become meaningful in terms of everyday life, they are quickly forgotten.
    (4) the learner's main task is that of absorbing the knowledge the teacher presents.

4. Classroom discussion are most effective if:

    (1) they are initiated by the teacher.
    (2) they are based on experiences that students have in common.
    (3) they center around the activities in the classroom.
    (4) the teacher makes it clear what attitudes should be changed or developed as a result of the discussion.

5. The reason for a difference between two groups in an experiment can be much more clearly established when

    (1) the treatment of persons in the same group is allowed to vary.
    (2) the two groups are equated on variables other than the one being studied.
    (3) the outcomes are correlated with aptitude scores.
    (4) the study is performed in the classroom rather than in the laboratory.

6. When we can recognize some of our own problems of behavior:

    (1) we can use them as case material in our teaching.
    (2) our anxiety is likely to be raised significantly.
    (3) our anxiety is likely to be lowered significantly.
    (4) we are less likely to be critical of students who have problems.

7. Mrs. Hoch has three boys in her 7th grade homeroom that have the highest IQs in the class. Two of them are doing average work, and one is failing. Examples like this show that:

    (1) intelligence test scores are of little value when it comes to predicting academic success.
    (2) academic aptitude is only one of several factors involved in grade-getting.
    (3) these boys are learning little, if anything, in the 7th grade.
    (4) IQs tell us more about girls than about boys.

8. Longitudinal studies are characterized by:

    (1) testing of the same individuals over extended periods of time.
    (2) longer write-ups of results than ordinary studies.
    (3) simpler experimental design than other studies.
    (4) geographical subject matter.

9. Adults who work with children tend to be most actively concerned with:

    (1) learning to understand children and their behavior.
    (2) helping children express their emotions in socially acceptable ways.
    (3) helping children control their emotions.
    (4) none of these.

10. The difficulty with the school curriculum today, according to the phenomenologists, is that it:

    (1) is overly concerned with problem solving.
    (2) is dominated by the philosophy and methods of the laboratory psychologists.
    (3) has no basis in learning theory.
    (4) consists largely of facts that have no meaning for students.

11. The term socialization refers to

    (1) preparing a person to function as a member of a society.
    (2) interpersonal relations in a social group.
    (3) the school subjects that deal with problems of society.
    (4) preparation for democratic citizenship.

12. The fallacy in our attitudes and methods of discipline arises from the assumption that:

    (1) children would really prefer to be told what to do rather than make their own decisions.
    (2) children can learn self-discipline through being controlled and directed.
    (3) too much freedom is bad for a child.
    (4) too little freedom is bad for a child.

13. Which of the following is the least effective method of dealing with the child whose academic performance is markedly below the standard for his grade?

(1) the teacher should give him as much personal attention and help as he can.
(2) he should be referred to a school psychologist.
(3) he should not be excused from committee work and other group activities of the class.
(4) he should be encouraged to repeat the grade.

14. In attempting to decide whether a specific achievement test is appropriate for the measurement of goals for which he has taught, the teacher should be guided primarily by:

(1) Buros' Mental Measurement Yearbooks.
(2) the test manual.
(3) the content of the test.
(4) test reviews in professional journals.

15. Both middle-class and lower-class children misbehave at times, but the misbehavior of middle-class children:

(1) is more likely to be punished.
(2) is more likely to be accompanied by feelings of guilt or anxiety.
(3) is likely to consist of more serious forms of behavior deviations.
(4) is more likely to be punished by spanking.

16. The shy and socially ineffective pupil is most likely to be helped by:

(1) discussing with the teacher the results of a personality test.
(2) being left alone so that he will not be embarrassed.
(3) experiencing success in group activities.
(4) reading books which deal with persons who have similar difficulties.

17. Frank Linen is a fifth grader. Next week his class will start a unit on Mexico. Whether or not Frank will learn anything about Mexico will be determined to the greatest extent by:

(1) the amount of time and energy the teacher puts into preparing the unit.
(2) the interest Frank's parents demonstrate in the school and in educational matters.
(3) whether Frank is an early or a late maturer.
(4) Frank's attitudes.

18. Which of these best illustrates a teacher's attempt to allow for individual differences?

(1) Using test data to determine what text the class should read.
(2) Observing pupils as they work and making helpful suggestions to each one.
(3) Giving tests so that pupils will see what progress they are making.
(4) Dividing the class into committees to make group reports on parts of a project.

19. Frank is 11 years old and likes to play baseball and other vigorous sports with other boys his age. His mother complains that he continually messes up his clothes by getting into fights before and after school. Most of these fights consist of what Frank calls "wrestling" -- half-playful, half-serious mauling and tangling with one or more of his classmates. He has little use for the girls in his class and sometimes teases them by trying to break up their games. It appears as though Frank's behavior is:

(1) normal for his age.
(2) immature.
(3) characteristic of a "late maturer".
(4) emotionally disturbed.

20. The most rigorous type of reliability is:

(1) equivalence.
(2) internal consistency.
(3) stability (test-retest by using the same test form).
(4) stability (test-retest by using alternate forms of the same test).

21. The level of aspiration we set for ourselves:

(1) is usually too high.
(2) is usually too low.
(3) is sensitive to past successes and failures.
(4) is determined by our extrinsic motivations.

22. Emotional stress during adolescence is most serious among

(1) boys maturing at age 16 and girls maturing at age 15.
(2) boys maturing at age 16 and girls maturing at age 11.
(3) boys maturing at age 13 and girls maturing at age 11.
(4) boys maturing at age 13 and girls maturing at age 15.

23. The British system of assigning children to one of three kinds of secondary schools, on the basis of scores they make on an examination taken at age 11, is more likely to work a hardship on:

(1) the late-maturing child.
(2) the early-maturing child.
(3) girls.
(4) none of these.

24. In writing an anecdotal record which is to go into a pupil's cumulative record folder, the report should:

(1) emphasize the teacher's reaction to the pupil.
(2) describe the behavior of the pupil.
(3) point out the pupil's personal problems.
(4) be an interpretation of the present incident in the light of earlier contacts with the pupil.

25. A teacher must inevitably become concerned with the problem behavior of students because:

    (1) of his professional role as a part-time psychotherapist.
    (2) of his professional role as a part-time social welfare worker.
    (3) he should be concerned about anything that affects learning.
    (4) he should not allow students to do anything that their parents do not allow.

26. Florence is particularly well-liked by both boys and girls in her ninth grade class. She was elected class president in the eighth grade, and this year was elected school president. Chances are that she is:

    (1) an early-maturing adolescent.
    (2) a late-maturing adolescent.
    (3) a person who has more than her share of anxieties and problems.
    (4) none of these.

27. One of the shortcomings of laboratory research in learning, as far as teachers are concerned, is that it:

    (1) goes into too minute detail into the background and personal history of the learner.
    (2) leads to a preoccupation with what is done to the learner, rather than with the learner himself.
    (3) is overly concerned with the causes and purposes of learning behavior to the point that teaching techniques are ignored altogether.
    (4) is overly concerned with the way in which the learner perceives the personality of the teacher or the experimenter.

28. Information and skills are more readily remembered if:

    (1) they are committed to memory or practiced.
    (2) a student is willing to spend enough time in mastering them.
    (3) teachers are willing to stress their importance and assign enough time to them.
    (4) a student perceives their relationship to previous knowledge and experience.

29. A young child is conditioned to fear a fuzzy black Teddy bear. After a short period of time, he becomes fearful of any black, fuzzy object. This process is called:

    (1) spontaneous recovery.
    (2) negative transfer.
    (3) generalization.
    (4) operant conditioning.

30. One characteristic that behavior mechanisms such as regression, repression, and displaced hostility have in common is that they:

    (1) are attempts to escape from or to reduce anxiety.
    (2) are motivated by the urge to conform.
    (3) should receive psychiatric treatment.
    (4) are more characteristic of children, rather than of adults.

31. Norms furnished with standardized achievement tests

    (1) indicate what level of achievement the author judges to be desirable.
    (2) show what performance the teacher should require of his class.
    (3) represent typical achievement, which may be good or bad.
    (4) can be used to evaluate the validity and reliability of the test.

32. Developmental tasks pose difficulty for children because of the discrepancy between:

    (1) the expectancies of school and home.
    (2) the abilities of boys and girls.
    (3) the demands of different teachers.
    (4) the child's readiness and society's expectations.

33. A common mistake that teachers and principals make when they talk to a student who is upset and who has some kind of a problem or difficulty is this:

    (1) they assume that they are really acting out of sympathy for the child, whereas they are merely wanting to interfere.
    (2) they assume that they automatically have the confidence of the student.
    (3) they encourage the student to talk and do not ask enough of the right kinds of questions.
    (4) they assume that the student can solve his problem without any help on the part of the school.

34. If a pupil comes from the lower socio-economic classes the teacher can assume:

    (1) he will have little interest in school work.
    (2) that he will be a disciplinary problem.
    (3) that he may possess behaviors that vary from middle-class standards.
    (4) that he will use very poor English.

35. Miss Koch asked the science supervisor: "How can I motivate my students to be more interested in biology?" Miss Koch's question seems to imply an assumption that:

    (1) motivation is something that can be turned on or off by the teacher.
    (2) students are normally uninterested in biology.
    (3) learning is primarily the responsibility of the learner, rather than that of the teacher.
    (4) all of these are true.

36. The clearest evidence that a principle is truly learned is that the pupil can

    (1) explain it in his own words.
    (2) illustrate it.
    (3) apply it to new situations.
    (4) explain the application of it that appeared in the text.

37. It is important for a teacher to understand the social-class backgrounds of the students he teaches because:

    (1) he has a better idea of what kinds of behavior to expect of them.
    (2) such information is usually required for school records.
    (3) he is then able to set up learning groups in his classes according to their family background.
    (4) he is thus helped to understand their behavior better.

38. The primary purpose of using a test blueprint in the development of an achievement test is to:

    (1) translate statements of objectives from non-behavioral terms to behavioral terms.
    (2) help insure that each objective will be given the desired relative emphasis on the test.
    (3) show the students the content to be covered by the test.
    (4) translate ultimate into immediate objectives.

39. Three groups of students learn the same set of words. Group A then goes on to learn another set of somewhat similar words; Group B goes swimming; Group C goes on to learn a set of nonsense syllables. In descending order (from high to low) of amount retained when tested one day later, the groups would rank:

    (1) BCA
    (2) ABC
    (3) CBA
    (4) CAB

40. Our self-concept is to a large extent composed of:

    (1) attitudes that we have developed independently of what others think of us.
    (2) the reflected appraisals of others.
    (3) the relationship between our personality and our character.
    (4) none of these.

41. A scientific attitude is best developed by

    (1) a laboratory course in which the student follows the laboratory manual carefully.
    (2) fostering faith in the textbook as an authority.
    (3) permitting students to conduct experiments without foreknowledge of the results.
    (4) demonstrating important experiments and explaining their contribution to the advance of science.

42. The role of education has traditionally been that of:

    (1) helping children realize their best potentials.
    (2) punishing children.
    (3) helping children do the best they can at their own level of competency.
    (4) forcing children into adultlike patterns of behavior.

43. Which of the following can provide the most effective direction and guidance of a pupil's learning:

(1) a monthly grade in each subject.
(2) a comprehensive year-end examination.
(3) prompt analysis of his errors and a report of them to him.
(4) opportunity for parent-teacher conferences.

44. Many of our difficulties in dealing with students who are handicapped in reading or in speech stem from:

(1) the fact that the great majority of these students are also mentally retarded.
(2) the inability of such students to follow directions and observe rules.
(3) our tendency to "overprotect" them from experiences that would aggravate their feelings of frustration and failure.
(4) our unwillingness to recognize the importance of emotional factors in their behavior.

45. When the teacher suspects that many of the pupils do not understand his presentation, the best procedure is to

(1) tell the students to feel free to ask questions.
(2) ask questions to find out what students do not understand.
(3) repeat the presentation using other wording and illustrations.
(4) repeat the presentation, stripping it down to the essential words.

46. An important reason for the advantage of the self-recitation method is that:

(1) it forces the reader to define and select that which he wishes to remember.
(2) it cuts down on the effects of fatigue.
(3) it enhances reminiscence effects.
(4) it lessens the effect of retroactive inhibition.

47. In view of the powerful effect that groups have on the attitudes and behavior of their members, it would be well for teachers to:

(1) combat group influences by setting standards for those individual students they can "reach".
(2) dominate the group and thus influence its standards and norms.
(3) try to work with groups, rather than against them.
(4) separate and divide students so that they have little opportunity to form groups.

48. The objective test has as its most important advantage over the essay examination that it:

(1) saves time for the teacher.
(2) provides for a more complete sampling of content.
(3) has higher content validity.
(4) measures a greater range of instructional objectives.

49. A problem pupil who is also not doing well in algebra can be motivated to do better work by:

(1) noting the good things he does and commending him for them.
(2) explaining to him that a person with his high ability could do much better work.
(3) giving him a diagnostic test in algebra and showing him the results.
(4) sending a note to his parents asking them to insist that he devote more time to study.

50. Ability to take responsibility during adolescence is largely dependent upon:

(1) intelligence.
(2) physical stamina.
(3) previous experience in handling responsibility.
(4) the number of siblings the adolescent may have.

51. There is some evidence to show that students who have the highest achievement:

(1) have teachers who are warm and friendly.
(2) have attitudes and values that resemble those of their teachers.
(3) prefer a teacher-dominated classroom.
(4) prefer a student-dominated classroom.

52. The concept of instinct:

(1) is useful in explaining much human behavior.
(2) has been largely rejected by current psychologists as a valuable explanatory principle.
(3) applies to mental traits but not to physical activities.
(4) is useful primarily in explaining the behavior of primitive tribes.

53. An understanding of education based on common sense, personal evaluations, and pre-scientific data:

(1) may be characterized as the chief objective of educational psychology.
(2) is a major contribution of the educational psychologist.
(3) lacks usefulness and validity.
(4) may interfere with the development of a fuller understanding of educational processes.

54. To make the educational psychology course function more effectively in actual teaching situations, the student should:

(1) observe and analyze in terms of psychological principles the behavior of children in classrooms.
(2) read more supplementary books and articles on educational psychology.
(3) major in psychology or sociology.
(4) learn and try to remember as many facts and principles from the field of educational psychology as possible.

55. David Riesman suggests that the more able a teacher is, the more apprehensive some students become, because:

(1) they are afraid that he may dominate the classroom.
(2) it may be difficult for them to resist learning.
(3) such teachers tend to be more learner-centered.
(4) of none of these reasons.

56. One of the difficulties teachers encounter in attempting to apply reward-and-punishment concepts of learning arises when:

(1) students expect to be rewarded for learning.
(2) students expect to be punished for not learning.
(3) what is supposed to be punishment is viewed by some students as a reward.
(4) students come to think of a teacher as a parent figure.

57. Although drill finds considerable support in traditional and prescientific theories about education, in actual practice:

(1) teachers prefer not to use it.
(2) it may interfere with learning.
(3) it is of value only for subjects like spelling and foreign languages.
(4) it produces results that cannot be obtained under any other method of teaching.

58. Which one of the following is not true about educational objectives or goals?

(1) Measurement is the only way a teacher can determine if he/she has achieved his/her objectives.
(2) No single measuring device can be used to measure all objectives.
(3) Objectives may be either immediate or ultimate.
(4) The measurement of most objectives is concerned with ultimate goals.
(5) Objectives are important in that they give direction and purpose to teaching.

59. One of the problems in helping students develop self-discipline arises from the fact that:

(1) control and direction are to some degree contradictory concepts.
(2) obedience and responsibility are to some extent contradictory concepts.
(3) schools are inclined to place too much emphasis on competition.
(4) the development of self-discipline interferes with the processes of learning.

60. The real motives that underlie most of the problem behavior a child displays in the classroom:

(1) are probably beyond the awareness of the child.
(2) are rather obvious.
(3) can be determined by any intelligent teacher who takes the time and trouble to talk seriously to the child.
(4) can be determined by interviewing the child's parents.

61. The problems of the adolescent period are aggravated by:

(1) the fact that adolescents understand their parents' wishes and feelings very well, but choose to be stubborn.
(2) the fact that parents understand their adolescent children's wishes and feelings very well, but choose to be stubborn.
(3) both parents and children become psychologically isolated from each other.
(4) none of these.

62. Research with small groups appears to indicate that:

(1) competitive behavior aids the functioning of the group.
(2) competitive behavior interferes with the functioning of the group.
(3) once the competitive balance of the group is disturbed, it is difficult to keep the group working together.
(4) the skills of cooperation are more readily learned than are those of competition.

63. The most easily defensible use of tests in modern schools is for:

(1) teacher evaluation.
(2) maintenance of standards.
(3) accreditation of schools.
(4) pupil guidance.
(5) motivation of study.

64. The fact that learning is bound to involve some change in the individual means that:

(1) every change will result in some kind of positive growth.
(2) learning is almost certain to involve some anxiety.
(3) the more changes the teacher is able to introduce into the classroom, the more learning will take place.
(4) all of these are true.

65. Mr. Parch is concerned because he has found evidence of cheating in the weekly quizzes he gives in his biology course. His best approach to this problem, from the standpoint of both the immediate situation, as well as the long-range goals of education, would be that of:

(1) opening up the matter for class discussion.
(2) having a school psychologist or a guidance worker talk to the class.
(3) calling the matter to the attention of the school principal.
(4) setting a trap to catch the students who are doing the cheating.

66. At the end of the semester a history teacher gave his pupils an essay test on the material covered during the preceding weeks. When he graded the papers he deducted points from the total score for spelling, grammar, and English usage. In so doing he:

(1) increased the accuracy of his final grades.
(2) increased the objectivity of measurements.
(3) lowered the reliability of the test.
(4) lowered the validity of the test.

67. The American children of European immigrants tend to have more than their share of problems of emotional and social adjustment because:

(1) children in Europe are more strictly disciplined than they are here.
(2) children in Europe are given more love and attention than they receive here.
(3) there is a conflict between the values of the parents and the values of the American culture.
(4) they are not as well off, economically speaking, as other American children.

68. Children who lack anxiety:

(1) tend to be, on the whole, better adjusted.
(2) are inconsiderate of the rights and feelings of others.
(3) are more effective learners.
(4) are well-liked by other children and adults.

69. Sue answered 25 questions correctly out of 50 items on an arithmetic test. What interpretation can be made of Sue's performance on the test?

(1) Sue fell at the 50th percentile.
(2) Sue needs remedial work in arithmetic.
(3) Sue knows about one-half of the material in arithmetic taught in her grade.
(4) no interpretation of the score is possible on the basis of the information given.

70. The most significant learning that takes place in the family setting:

(1) occurs when parents deliberately and consciously undertake to train their children.
(2) is the result of attitudes that parents communicate unconsciously.
(3) is less significant than the learning that occurs in the classroom.
(4) has scholastic or academic, rather than emotional, value.

71. One of the main objectives of the schools, as regards discipline, is to develop people who, as adults, will be able to:

(1) know how to develop and contribute to standards of behavior, as well as respond to them.
(2) direct and control the behavior of others, particularly the behavior of children.
(3) obey persons in authority without questioning orders and regulations.
(4) develop their own standards of behavior in terms of what they know is right.

72. Ronald is 15 and is the class clown. He is always full of tricks and wisecracks. Most of the time his classmates tolerate and even enjoy his humor, but sometimes they get impatient with him. Chances are that Ronald is:

(1) an early-maturing adolescent.
(2) a late-maturing adolescent.
(3) an adolescent who is well into the puberal cycle of development.
(4) none of these.

73. When standardized achievement tests are used routinely as the only means to evaluate the effectiveness of a learning situation:

(1) both teachers and learners will be stimulated to greater and more productive efforts.
(2) there is a danger that achievement test scores may become the sole index to educational success.
(3) there is a danger that a student's IQ will be the primary determination of whether or not he is to be promoted or graduated.
(4) educational objectives may become too broad or vague.

74. As contrasted with nursery-school children, kindergartoners are more likely to:

(1) seek attention and approval from the teacher.
(2) seek attention and approval from their parents.
(3) seek attention and approval from one another.
(4) display a greater number of behavior problems.

75. The way in which an individual perceives his environment is for him:

(1) reality.
(2) the self.
(3) his normative needs.
(4) his psychological needs.

76. When Suzie was nine years old, she was still sleeping with a blanket that had been a coverlet for her crib when she was a baby. She became very resentful of any attempts to deprive her of this blanket, because:

(1) she resented being told what to do and what not to do.
(2) she was a problem child.
(3) her parents were unable or unwilling to reason with her.
(4) the blanket had become psychologically a part of her.

77. Whenever she notices any of her third graders showing any marked progress in their learning tasks, Miss Kanos makes it a point to compliment them. Miss Kanos is evidently using a form of:

(1) classical conditioning.
(2) operant conditioning.
(3) Gestalt psychology.
(4) none of these.

78. Research in the field of group behavior indicates that the greatest changes in the behavior of individuals come about through the influence of:

(1) the leader or teacher on the individuals.
(2) the leader or teacher on the group.
(3) the individual on the group.
(4) the group on the individual.

79. Most people think of behavior as:

(1) having a single cause.
(2) having multiple causes.
(3) indicating a need for discipline.
(4) something that must be corrected by teaching.

80. It is important for teachers to have a thorough understanding of popular beliefs about learning because:

(1) they will have to deal with parents whose understanding of learning processes is likely to be naive and unsophisticated.
(2) their effectiveness as teachers will depend in part on their abilit; to unlearn some of their own beliefs about learning.
(3) teachers and administrators today place little faith in outmoded theories about learning.
(4) of none of these reasons.

81. "Students in school today are pampered and coddled." The person who made that statement evidently subscribes to the idea that:

(1) learning is best stimulated by a "system of rewards and punishments
(2) "mental discipline" is the best way to promote learning.
(3) learning proceeds inductively.
(4) learning proceeds deductively.

82. Research with very young children who receive less than normal amounts of attention indicates that they:

(1) learn to be more self-sufficient than other children.
(2) tend to be developmentally advanced.
(3) tend to be developmentally retarded.
(4) tend to live in broken homes.

83. A person can most easily use prior learning in a new situation if:

(1) he has been extensively drilled on the previously learned material.
(2) he is taught principles and generalization.
(3) the concepts to be learned are abstract rather than concrete.
(4) he is of average intelligence.

84. One of the most effective things teachers can do to aid the social development of students is that of:

(1) giving them chances to examine and discuss their own behavior.
(2) insisting that they develop correct patterns of thinking.
(3) pointing out the differences between right and wrong behavior.
(4) overlooking instances of misbehavior.

85. By insight we mean:

(1) making the correct associations to stimulus words almost 100 per cent of the time.
(2) learning stimulus-response sequences of great complexity.
(3) arriving at the correct solution to abstract problems.
(4) the solving of a problem through perceiving the relationships essential to solution.

86. Many teachers find it difficult to deal with the behavior of different students in differing ways because:

(1) the rules of the school require teachers to administer specific kinds of punishment for specific infractions of the rules.
(2) they feel it is "undemocratic" to treat the same kind of offense differently for different children.
(3) students should not be punished, no matter what they do in the classroom.
(4) punishment should be administered by school authorities or parents, not the teacher.

87. The most effective contribution the school can make to the prevention of juvenile delinquency is that of:

(1) keeping young people involved in learning situations that are interesting, challenging, and worthwhile.
(2) teaching young people the difference between right and wrong.
(3) applying disciplinary measures to the first appearance of misbehavior.
(4) providing psychotherapy for problem students, as well as for their parents.

88. Grading in most school systems is done inconsistently because:

(1) teachers make the final judgment.
(2) common standards are lacking.
(3) grades relate only to immediate goals.
(4) subjects differ in difficulty.

89. Probably the most potent transmitter(s) of prejudice is (are):

(1) hate organizations that distribute hate literature.
(2) radio and television.
(3) advertisements in newspapers.
(4) unintentional communication by parents and adults.

90. If we insist that all learning should be pleasurable, there is a danger that we will inhibit:

(1) deductive learning.
(2) inductive learning.
(3) learning through mistakes.
(4) transfer of training.

91. Attitudes are key factors in education because they:

(1) stem from the basic psychological needs of the individual.
(2) determine the direction and strength of the individual's motivation toward learning.
(3) are more emotional than intellectual.
(4) determine whether a student will learn by wholes or by parts.

92. It would be most accurate to say that intelligence tests measure:

(1) a sample of the person's behavior.
(2) the person's innate capacity.
(3) the person's maturity level.
(4) the person's probable future success.

93. The value of norms provided by a test publisher depends primarily on:

(1) the number of pupils used to establish the norms.
(2) the the pupils are that were used to establish the norms.
(3) the validity of the test.
(4) the length of the test.
(5) the type of questions on the test.

94. If a student makes a false or misleading statement during class discussion, it is usually best for the teacher to:

(1) correct the statement immediately so that the class does not get any mistaken ideas.
(2) ask another student to correct the statement.
(3) ask for volunteers to supply the correct ideas.
(4) let the students take the initiative in correcting the statement.

95. Teachers who are aware that learning is shaped by attitudes will:

(1) think of learning as a series of developmental tasks.
(2) find out what needs, interests, and experiences students in their classrooms have more or less in common.
(3) postpone the learning tasks that students appear to have difficulty with.
(4) show students how their attitudes are being changed by the material they are studying.

96. Research evidence appears to indicate that the chief advantage of experimental curricula, such as core courses, lies in:

(1) the large gains they produce in the learning of information and skills.
(2) the modest gains they produce in the learning of information and skills.
(3) the gains they produce in the development of concepts and attitudes.
(4) the way they make the task of the learner simpler and more easily resolved.

97. A dual marking system usually shows:

(1) IQ and subject achievement of individual child.
(2) self-evaluation and peer evaluation.
(3) self-evaluation and teacher evaluation.
(4) achievement level and progress in relation to individual ability.

98. The simplest way for a teacher to determine whether the test is appropriate in difficulty for the group tested is to:

(1) study the score distribution.
(2) group items according to type.
(3) compute discrimination indices.
(4) study the reliability coefficient.

99. Teaching involves five essential processes. Which one should come first?

(1) Measuring results.
(2) Selecting course content.
(3) Defining goals.
(4) Deciding on methods of instruction.

100. A major advantage of individual intelligence tests over group tests is that in the former:

(1) the standardization group is usually larger.
(2) information other than the test score can be obtained.
(3) the method of evaluation is more objective.
(4) there is less chance of cheating.

Case Studies in Teaching: Form A

Each of the case studies listed below was designed to illustrate one major principle of educational psychology. These principles are recorded on separate sheets.

Select the one principle which you feel is illustrated by a given case study and record your response on the special answer sheet.

You may select the same principle for more than one case study.

Case A: Mr. Williams requires his high school class in English literature to read a number of American novels. As one of the course requirements, he requires that they outline and summarize each of these books. He gives them a list of questions to answer. Classroom discussion of their answers is part of the regular classroom activities. All of the students are expected to contribute to the discussion.

Case B: Mr. Jones prides himself on the fact that he reads and corrects all his high school students' homework and tests in great detail. At the next class meeting, Mr. Jones returns the materials with the written comments and suggestions to the students.

Case C: After the Christmas holiday, the teacher of a fifth grade class observed that a number of the children had received presents of magnetic and electric toys and "household appliances". Capitalizing on their experiences, he began a science unit discussing the use of electricity and magnetism in toys, including such questions as "how does the toy work", "what is a battery", "did you get a shock?" This discussion led naturally to reading assignments in the class science text, outside readings, and the demonstration and construction of magnets, electric motors, etc.

Case D: Mr. Raymond's class of fifth grade children includes John, who despite average intellectual ability, is a very poor reader. There is Millicent, a new girl to the school, who has lived on a farm all her life, and who is shy and hesitant about participation in classroom activities. There is also Frank who is unusually competent in industrial arts, but who feels unconfident and awkward in music and art. William is an unusually bright child, a leader in sports and a fine student, who Mr. Raymond feels is being held back by the general level of the class. Mr. Raymond has divided the class into several instructional groups.

Case E: Karen has repeated the second and fifth grades and is now doing very poorly in the ninth grade at the Millstream Junior High School. She feels unaccepted by her classmates and teachers. Karen frequently refers to herself in unfavorable terms.

Case F: The children were studying "How the West Was Won". With the teacher's guidance, the children planned the work for the next two weeks. Three of the children were going to build an Indian village and they planned to go to the Library together to look up reference materials. Following their reading of these materials, they decided to meet at Jack's home the next afternoon to work up plans which would then be presented to the class for discussion and adoption.

Case G: The reports given by a class of high school students dealt with life in early Rome. There was much classroom discussion of family life, the role of the husband and wife, and the effects of the large slave population. The students used the discussion to explore their own feelings about the different roles played by men and women in our present day society.

Case H: Johnny was a new boy in the class and during the first week he did not join in the lunch-hour play period when the other pre-adolescent boys were playing baseball. He was only a fair athlete and in the past he had always been among the last to be chosen. That day in class they were discussing transportation and the discussion turned to air-freight. Since John's father held a supervisory position in the traffic department of the local airfield, he was very familiar with the subject. He gave an impromptu, but very interesting, talk to the class. His confidence and self-esteem bolstered by the experience, he was able to join the group the next day in baseball.

Case I: In the second grade classroom, there was an "arithmetic corner" where the children had an opportunity to handle boxes, play money, boxes of small sticks, jars of beans and an abacus. Jimmy was asked by Miss Jones, "If there are four brothers and their father gives each of them two cents, how much do they have altogether?" Jimmy took up a box of pennies and finding two kinds of beans, he selected a large red bean for the father and four black beans for the sons. He then gave each "bean-son" two pennies. He then counted the pennies and called out his answer "eight".

Case J: When Miss Smith met her arithmetic class at the Kenny Junior High School, she told the students that for the first six weeks of the term they would be reviewing the basic math operations they had learned in elementary school so that when they began the new work everyone would start on a firm foundation. However, a number of the children soon began to present disciplinary problems. Most of the children who were now doing poor work or who presented behavior problems had started the term with highly satisfactory work.

Case K: Miss Raymond walked into the principal's office with Philip in tow, held firmly by his arm. She stated that she caught him cheating and when she had pointed this out to him, he got fresh and sassed her. The principal expressed his understanding that he could see that this could be upsetting and then suggested he speak to Philip alone. He sat quietly for a moment and then asked Philip, "Could you tell me in your own words what happened?"

Case L:

Jack -- "Well I can't say that we do any stalling in our class either. Bet we do more reports than you do. And they must be just so. You know, before I write up my final copy I sort of check out my ideas with Mr. Smith (Jack's teacher). In this way I know just what he wants me to write. Sort of makes him the big-shot when I ask him whether he likes something this way or the other. Just give him what he wants and you'll make out alright."

Case M:

When Miss Williams called on Jane, she noticed that she was sitting with her head twisted in an unnatural position with one hand held upright and clenched in a fist. Jane did not seem to hear Miss Williams' request that she read and the request was repeated several times. Jane finally answered in a flat unemotional voice that she did not know where the class was reading at this time. Miss Williams was very irritated and warned Jane that this was the third time this had happened this week and if it happened again she was going to have to stay after school until she learned her lesson.

Case N:

Oliver had done barely passing work throughout his first three years of high school, but both he and his parents were very anxious that he get into college. His father bought him a paper back guide to college entrance tests and the two spent a long weekend working over typical questions. When Oliver appeared in school to take his College Entrance Examination he assured his friends that "he had it licked and he was going to score right through the top of the test".

Case O:

During a class discussion dealing with public health problems the teacher spoke of cancer as being a leading cause of mortality, but the interest of the class seemed low. The teacher asked how many children in this high school freshman class had known firsthand about a person who suffered from this disease. Only two of the students reported such knowledge. The teacher commented that the Public Health Service had conducted a number of studies to try to find an environmental link to the cause of this disease. Would it not be interesting to find out if this community was really unique?

Case P:

A few minutes before the three o'clock bell rings finishing the day, the teacher announces that she plans a test the next day covering the entire unit dealing with life in early Greece. She observed that most of the children did not seem interested. Thereupon she promised that everyone who did well would not have to write a report on the unit. Most students did poorly on the test.

Case Q:

Bill is not achieving up to his capacity. As a matter of fact he is failing all his subjects. Bill's parents, interviewed by the school psychologist, are annoyed about the whole situation. They point out that Bill's older brother was always much "smarter" than Bill, whom they have regarded since childhood as "too slow" and "too dopey". The analysis of personality tests given to Bill and the depth interview suggest that he is a person who "thinks very little of himself".

Case R: Mr. Marc's students really seem to know their history -- even a year later. When asked for his approach to teaching history, Mr. Marc said, "I teach history as a continuous record of the behavior of men -- their conflicts, aspirations, triumphs, defeats ... their motivations, their moments of greatness and despair. No, I don't emphasize recall of specific dates and names. I attempt to sketch a pattern of human behavior which may show up repeatedly at different period of history. Knowledge of the past may thus enable my students to cope better with the present and the future".

Case S: The class was very excited about the trip they were going to take to the new Lincoln Center. When the teacher tried to calm them down, Paul kept talking to his neighbor, while making a strumming noise with a rubber band. The teacher told him that if he did not stop at once he would not be able to go with the class to the concert. Paul only grinned and thought to himself, "That would be fine, because I really don't go for that long hair stuff anyway".

Case T: When William entered the Southern Valley High School as a transfer student from another state, he quickly demonstrated his ability to do outstanding work in all his class work. Mr. Compton, pleased by his interest in romantic poetry praised him publicly before the class, referring to him as an "intellectual". The boys teased him on the playground, calling him a "cracked egghead". His interest in English seemed to slowly disappear and he tended to avoid Mr. Compton whenever the latter tried to engage him in conversation.

Case Studies in Teaching: Form B

Each of the case studies listed below was designed to illustrate one major principle of educational psychology. These principles are recorded on separate sheets.

Select the *one* principle which you feel is illustrated by a given case study and record your response on the special answer sheet.

You may select the same principle for more than one case study.

Case A

Joanne, a high school junior, had been doing poorly in French. After seeing her last report card which showed a "D" in French, her father scolded her for a "lack of effort." Joanne's father told her if there were no improvement on the next report card, she would not be allowed to attend the junior prom. She had been looking forward to this with great anticipation. Joanne began to study very hard and her next report card showed a "B" in French.

Case B

In order to stimulate interest in the high school physical fitness program, the head of the department began a "leader's squad." After a student mastered a particular gymnastic feat he was given a score. Those boys with the highest over-all scores were placed in the leader's squad and given a leader's gym shirt. After a few weeks, there was a great improvement in gymnastic achievement.

Case C

Miss Hester starts each semester off with a battery of diagnostic tests in all skill subjects, i.e., arithmetic, spelling, reading, language arts. She immediately interprets the results with each child, discussing weaknesses and strengths.

Case D

Mr. Jennings, an 8th grade math teacher, gives a quiz to his class every Thursday. The next day his students get the corrected papers back. Mr. Jennings goes over the quiz with the entire class, reviewing in depth those items missed by many students in the class. Usually an analysis of the larger tests given on each unit do *not* reveal the same type of errors shown on the quizzes.

Case E

Miss Edwards, a 3rd grade social studies teacher, has just completed a unit on Democracy and the Bill of Rights. She administered an objective test on the material covered (i.e., equality, integration, etc.) on which the class performed very well. Later, during recess, Miss Edwards noticed that the class broke up into play groups which consisted of all Negroes or all white children.

Case F

Joanne, a 4th grader, scored 116 on an individual intelligence test. Her achievement however has always been below grade level. Investigation by the school psychologist showed that Joanne is the youngest of three sisters. Her parents always favored the older two referring them as examples of what Joanne should be and is not. Both of her sisters scored lower than Joanne on the same I.Q. test but are average or better in their school achievement.

Case G

John, a high school sophomore, was a poor French student. Extra help from his teacher combined with private tutoring was unsuccessful in improving his scholarship in French. John was a very good basketball player and was told that he might be able to win an athletic scholarship to college if he made varsity. His French grades improved after he was told that a failing grade would keep him from making the varsity team.

Case H

Mr. Jones found that his class was having difficulty in understanding the meaning of decimals. Students were constantly placing decimal points in the wrong place. Mr. Jones tried to show the meaning of decimals by using the monetary system as examples (.10 = 10¢, .25 = 25¢). He found that this resulted in a better understanding of the entire concept.

Case I

Mary, a 5th grader, has been doing failing work in most of her subjects. One month before final report cards, Mary asked her teacher "what she had to do to get all B's?" Her teacher replied that it would be just about impossible, but Mary insisted that if given the chance she could do it.

Case J

Mr. Kramer was trying to teach the concept of evaporation to his 4th grade class. The class was uninterested in the subject. He remarked about the heat of the room and how uncomfortable the students must feel. When he related their excessive perspiration to the concept of evaporation, the students became more attentive and discussed the subject.

Case K

John, a third grader, had been achieving at about a "C" level during the first half of the school year. At the half-year mark class elections were held and John was elected class president. Since the election, John's grades have been all B's and a few A's. In addition to the improvement in his work, John's conduct has improved and he has become neater and generally more conscientious.

Case L

Barbara, a 6th grader, was constantly in some sort of trouble. She got into fights with her classmates. She did not turn in assignments, often giving obviously fabricated excuses. In many other situations, Barbara also told transparent lies. Most of her lies could easily be shown for what they were and she would be punished. Most recently, she was caught in the act of stealing paper from the supply room which was strictly off limits to students.

Case M

Miss Davis, a kindergarten teacher, was having difficulty teaching the concept of "one." The children confused this particular concept with their previous knowledge of matching sets. They continued to match a picture of two people with a picture of one person. Miss Davis gave each child five sandwich bags, one at a time. The bags contained single items (one spoon, one fork, one cookie, one candy, one napkin, etc.). After this, they were able to recognize pictures in the "one" family and to match one to one objects in sets.

Case N

Mr. Jolson, who teaches the elementary special class for the mentally retarded, finds that he can teach concepts to his students which were considered too advanced for them by others. He is able to do this by breaking down the concept into its simplest form so that it can be meaningful to his students. Thus, he teaches multiplication by means of addition, e.g., 4 x 12 = 12 + 12 + 12 + 12.

Case O

As an useful teaching technique, a second grade teacher gives each child a word on a card. She then dictates a sentence and those holding the words used in the sentence stand in correct order to form the sentence in front of the class.

Case P

After a discussion of the virtues of honesty, Mr. Johnson told his class that they would be placed on an "Honor System." After a few weeks of taking examinations without the teacher in the room, Mr. Johnson found that the amount of copying from neighbors had greatly decreased.

Case Q

Tommy, a 4th grade Negro boy, was very withdrawn. He never spoke up in class unless asked a direct question. Tommy came to this school from a southern school which was not integrated. In the new school 90% of his class is white and the teacher is a white male. In his old school Tommy acted in a more outgoing fashion.

Case R

Mr. Jason assigns arithmetic exercises daily. He does not check these exercises every day but occasionally calls on various members of the class to do them on the board. Mr. Jason compliments those students who do the exercises correctly. Students never know when he will call upon them, but they are usually all well-prepared.

Case S

In a school which was not integrated, the pupils have just finished studying the Constitution and the Bill of Rights. Soon after the unit had been completed, a Negro boy was admitted under the provision of the Supreme Court ruling. The students welcomed the new boy and accepted him in their class.

Case T

Miss Kass, a high school art teacher, conducted her classes in a very strict manner. There was very little discussion and the students had to work in silence. Although all assignments were completed on time, she felt that the quality of the work was not up to the level of ability of her students. She decided to modify her teaching methods. Soon the students' work began to improve and become more original.

Case U

Although Mary was not as bright as most of the children in her third grade class, she always seemed to try her best. Her teacher, who was very understanding, frequently praised Mary and encouraged her to keep trying to do her best. Slowly but surely, Mary managed to improve her work by means of practice and careful work. By the end of the year, Mary had gone further than many children who had much more ability than she.

Case V

Jack, a 2nd grader, was very bright. Because he turned in a completely correct arithmetic test his teacher assigned him to join a group of three girls who were doing advanced work by themselves in the corner of the room. On the next test, Jack only did 75% of the work correctly. The following time he only got one example out of a total of ten correct.

Case W

Mr. King, a sixth grade teacher, taught the subject of fractions and decimals as one unit. Whenever children would try to solve a problem by applying incorrect methods or reasoning, Mr. King would stop them and show them why the correct solution is the only possible answer. The relationship between decimals and fractions was always stressed and the children had to solve the problems using both fractions and decimals. Although the children took more time to learn, they seemed to understand the material very well and were able to apply what they had learned to many types of problems.

Case X

Jerome, a 16-year-old high school junior, received poor grades on his mid-semester report card. As a result of his poor scholarship, Jerome decided to drop out of school. He told his counselor that "if I am not good enough to pass in school, I might at least be able to get a job and earn some money."

Case Y

Miss O'Toole assigns optional work to her 4th grade class in addition to the regular homework. Every once-in-a-while she asks who has done the extra work for that day. Those who have done so are given extra credit. Miss O'Toole has found that most of the class does the extra work every day.

Selected Principles of Educational Psychology

Principle #1: Concepts, when meaningfully related to general principles, are retained better than rote-learned detached details.

Principle #2: Self-imposed discipline is more effective than externally imposed discipline.

Principle #3: What constitutes "reward" or "punishment" has to be seen from the perspective of the learner.

Principle #4: Effective learning involves the active participation of the learner.

Principle #5: The pressure exerted by peer groups is a potent force which can effectively change behavior.

Principle #6: A pupil's self-concept is an important determinant of his behavior.

Principle #7: A pupil learns only when he is motivated to learn.

Principle #8: Unsatisfactory and disappointing learning experiences lower a student's self-esteem.

Principle #9: The most potent reward for classroom learning is the teacher's acceptance of what the student does and the way he does it.

Principle #10: To understand behavior one must be aware of the context in which it appears.

Principle #11: Motivation is aroused by relating the subject matter to the student's own personal experience.

Principle #12: Every behavioral phenomenon has various causes.

Principle #13: Pupils are best taught concepts by giving them concrete experiences.

Principle #14: Teachers should be sensitive to behavioral symptoms that might reflect a severe underlying emotional problem.

Principle #15: Extrinsic motivation is usually less effective than intrinsic motivation.

Principle #16: Learning involves formation and clarification of attitudes as well as comprehension of specific content and facts.

Principle #17: Under authoritarian leadership, productivity tends to remain high but creativity is likely to be stifled.

Principle #18: Students with a history of chronic failure tend to have unrealistic levels of aspiration.

Principle #19: Success experiences and the boosting of one's self-esteem help the person cope more effectively with other situations.

Principle #20: Teaching should be geared to individual differences.

Principle #21: In dealing with a behavior problem, it is important to get the pupil's point of view.

Principle #22: Intermittent rewards are more effective than regular rewards.

Principle #23: Learning takes place only when the act that is performed is rewarded.

Principle #24: Teaching must be geared to the pupil's level of functioning.

Principle #25: A prompt analysis and evaluation of a student's responses facilitates his learning.

FAIRLEIGH DICKINSON UNIVERSITY

TEACHER AIDE PROGRAM

STUDENT QUESTIONNAIRE: FORM A

I. Background Data

1-6 ____________ Name ______________________________ #19D __________
Code No. Last First Middle

Age __________

7 A. Which level and/or subject are you planning to teach?

___Elementary school: Grade(s)____________________

___Secondary school: Subject(s)______________________________

If you are not planning to teach, what is your vocational goal?

____

8 B. College Status: ___Freshman (0-32 credits)

___Sophomore (33-64 credits)

___Junior (65-96 credits)

___Senior (97 credits or more)

C. Please list courses and credits as indicated below:

9 1. Psychology courses previously taken (e.g., General Psych. 3):

10 2. Psychology courses you are currently taking in addition to Ed. Psych.:

11 3. Education courses previously taken:

12 4. Education courses you are currently taking:

D. Have you had any previous experience - paid or voluntary - related to teaching? (e.g., tutoring, teaching, field trips to schools, School Aide Service, camp counselling, etc.) If yes, please list these experiences below:

Nature of experience	Approximate duration (give dates)

13

II. Vocational Choice

A. There are many reasons why people choose a profession. On the next page are listed 25 of the more common motives cited by people who choose the teaching profession.

Consider the degree to which each of these reasons has influenced your choice of teaching as your profession.

First determine the three (3) reasons which were least influential in your choice of teaching and place a checkmark next to each of them in the column labeled "least."

Then determine the three (3) reasons which were most influential and place a checkmark next to each of them in the column labeled "most."

Similarly, place checkmarks in the appropriate column . . . . .

next to the five (5) reasons which you regard as slightly

next to the nine (9) reasons which you regard as about half/half

next to the five (5) reasons which you regard as much

influential in your choice of teaching

When you are through, you should have checked:

3 reasons in each of the two columns labeled "least" and "most"
5 reasons in each of the two columns labeled "slightly" and "much," and
9 reasons in the column labeled "half/half."

REASON	least (1)	slightly (2)	half/half (3)	much (4)	most (5)
14. I like to work in clean and pleasant surroundings					
15. Teaching offers job security.					
16. I enjoy the intellectual fellowship of other teachers					
17. I like to be in a position of authority					
18. I like working with children.					
19. Teaching is relatively easy work.					
20. I like being with people.					
21. Teaching offers attractive salaries					
22. Teaching gives me a feeling of accomplishment					
23. Teaching may correct some of the shortcomings of my past.					
24. Teaching is less competitive than other professions					
25. I like to render service to society					
26. I like a job which is not monotonous.					
27. Teaching is a convenient job for a woman (or a man)					
28. I like the school-room atmosphere and want to stay in it					
29. Teaching offers me an avenue of escape from the harsh realities of life					
30. I like the continuous opportunity to learn.					
31. Teaching allows me to express hostility without too much criticism.					
32. Teaching offers me the chance to be creative.					
33. Training for teaching involves less time, money, and effort than do many other professions					
34. Teaching is a good job to fall back on in case of emergency					
35. I can utilize my capabilities, e.g., public speaking, organization, leadership, etc.					
36. Teaching offers me a continuous opportunity to relive periods of my childhood.					
37. I like to give and receive love to children					
38. Teaching offers good financial returns in the beginning with a minimum of experience.					

B. Check and list below the three choices of professions or occupations which you, immediately upon graduation, IDEALLY would like to have:

39 First choice: ___teaching; ___non-teaching; ______________ (specify profession or occupation)

40 Second choice: ___teaching; ___non-teaching; ______________ (specify profession or occupation)

41 Third choice: ___teaching; ___non-teaching; ______________ (specify profession or occupation)

C. Check and list below the three professions or occupations which you, immediately upon graduation, might REALISTICALLY expect to secure:

First choice: ___teaching; ___non-teaching; ______________ (specify profession or occupation)

42

Second choice: ___teaching; ___non-teaching; ______________ (specify profession or occupation)

43

Third choice: ___teaching; ___non-teaching; ______________ (specify profession or occupation)

D. How certain are you about your decision to become a teacher?

Place a checkmark on the appropriate spot along the scale below:

44-45 (1) (2) (3) (4) (5) (6) (7) (8) (9)

↑	↑	↑
I am very certain: I will not become a teacher	I am uncertain whether or not I will become a teacher	I am very certain: I will become a teacher

E. Please explain your rating:

III. Teacher Roles

A. Teachers, like other professionals, assume many roles. For instance, some of the roles assumed by chemists are: researcher, consultant, supervisor, and administrator. What are the teacher's roles? Please list them below:

46-47

B. What duties and assignments do you think teachers have in addition to classroom instruction? Please list these below:

48-49

FAIRLEIGH DICKINSON UNIVERSITY

TEACHER AIDE PROGRAM

STUDENT QUESTIONNAIRE: FORM B

I. Background Data

- 6 ________ Name ____________________________________ #19D____
Code No. Last First Middle

Which level and/or subject are you planning to teach?

___Elementary school; Grade(s)________

___Secondary school; Subject(s)______________________________

Is this the same choice which you indicated at the beginning of the semester?

7 ___Yes; ___No. If "No", please indicate the reasons for a change in your choice of level and/or subject. ______________________________

II. Vocational Choice

A. There are many reasons why people choose a profession. On the next page are listed 25 of the more common motives cited by people who choose the teaching profession.

Consider the degree to which each of these reasons has influenced your choice of teaching as your profession.

First determine the three (3) reasons which were least influential in your choice of teaching and place a checkmark next to each of them in the column labeled "least."

Then determine the three (3) reasons which were most influential and place a checkmark next to each of them in the column labeled "most."

Similarly, place checkmarks in the appropriate column.....

next to the five (5) reasons which you regard as slightly
next to the nine (9) reasons which you regard as about half/half
next to the five (5) reasons which you regard as much

} influential in your choice of teaching

When you are through, you should have checked:

3 reasons in each of the two columns labeled "least" and "most,"
5 reasons in each of the two columns labeled "slightly" and "much," and
9 reasons in the column labeled "half/half."

	REASON	least (1)	slightly (2)	half/half (3)	much (4)	most (5)
8.	I like to work in clean and pleasant surroundings					
9.	Teaching offers job security.					
0.	I enjoy the intellectual fellowship of other teachers					
1.	I like to be in a position of authority					
2.	I like working with children.					
3.	Teaching is relatively easy work.					
4.	I like being with people.					
5.	Teaching offers attractive salaries					
6.	Teaching gives me a feeling of accomplishment					
7.	Teaching may correct some of the shortcomings of my past. . .					
8.	Teaching is less competitive than other professions					
9.	I like to render service to society					
0.	I like a job which is not monotonous.					
1.	Teaching is a convenient job for a woman (or a man)					
2.	I like the school-room atmosphere and want to stay in it. . .					
3.	Teaching offers me an avenue of escape from the harsh realities of life					
4.	I like the continuous opportunity to learn.					
5.	Teaching allows me to express hostility without too much criticism					
6.	Teaching offers me the chance to be creative.					
7.	Training for teaching involves less time, money, and effort than do many other professions.					
8.	Teaching is a good job to fall back on in case of emergency .					
9.	I can utilise my capabilities, e.g., public speaking, organization, leadership, etc.					
0.	Teaching offers me a continuous opportunity to relive periods of my childhood					
1.	I like to give and receive love of children					
2.	Teaching offers good financial returns in the beginning with a minimum of experience					

B. Check and list below the three choices of professions or occupations which you, immediately upon graduation, IDEALLY would like to have:

33 First choice: ___teaching; ___non-teaching; ____________________ (specify profession or occupation)

34 Second choice: ___teaching; ___non-teaching; ____________________ (specify profession or occupation)

35 Third choice: ___teaching; ___non-teaching; ____________________ (specify profession or occupation)

C. Check and list below the three professions or occupations which you, immediately upon graduation, might REALISTICALLY expect to secure:

First choice: ___teaching; ___non-teaching; ____________________ (specify profession or occupation)

36 Second choice: ___teaching; ___non-teaching; ____________________ (specify profession or occupation)

37 Third choice: ___teaching; ___non-teaching; ____________________ (specify profession or occupation)

D. How certain are you about your decision to become a teacher?

Place a checkmark on the appropriate spot along the scale below:

38-39

(1) (2) (3) (4) (5) (6) (7) (8) (9)

(1) ↑ I am very certain: I will not become a teacher

(5) ↑ I am uncertain whether or not I will become a teacher

(9) ↑ I am very certain: I will become a teacher

E. Please explain your rating:

III. Teacher Roles

A. Teachers, like other professionals, assume many roles. For instance, some of the roles assumed by chemists are: researcher, consultant, supervisor, and administrator. What are the teacher's roles? Please list them below:

40-41

B. What duties and assignments do you think teachers have in addition to classroom instruction? Please list these below:

42-43

Fairleigh Dickinson University

TEACHER AIDE PROGRAM

Mid-semester Evaluation by Teacher Aide

The main purpose of this form is to enable future students to benefit from your experiences through your evaluation of the Teacher Aide Program. Therefore, please complete this form frankly and thoughtfully.

Your name ______________________________ Date ____________________
(Last) (First)

Name of your cooperating teacher ____________________ School ____________________

Name of your seminar leader ______________________________

I. Experiences and Activities

A. Please list the kinds of experiences and activities which you have had to date. Be very specific, e.g., observed history class, assisted child with spelling, etc. Name first the experiences and activities which involved the most time. Also indicate the approximate amount of time (in minutes) or the frequency of each experience or activity.

Experience or Activity	Approx. time (minutes) or Frequency

B. Which experiences and activities did you find particularly valuable? Why?

C. Which experiences and activities did you not find particularly valuable? Why?

D. Which additional experiences and activities would you like to have?

II. Seminars

The purpose of the seminars is (a) to enable you to discuss and share your Teacher Aide experiences and (b) to help you integrate the theoretical knowledge acquired in the college classroom lectures with your practical experience in the school classroom.

A. To what extent do your seminars realize these objectives, i.e., are helpful?

B. To what extent do your seminars not realize these objectives, i.e., are not helpful?

C. What suggestions, if any, can you offer to improve the seminars?

III. Classroom Lectures

A. To what extent do the lectures give you a theoretical foundation?

B. What suggestions, if any, can you offer to improve the lectures?

IV. General Comments

Please offer comments on any aspect of the Teacher Aide Program, e.g., problems which you have encountered, particularly profitable or unprofitable experiences and activities, criticisms of the program, suggestions for improving the program, etc.

Fairleigh Dickinson University

TEACHER AIDE PROGRAM

Interview Schedule - 5/64

The purpose of this form is to help us assess the value of the Teacher Aide Program and thus to improve it. Therefore, please complete this form frankly and thoughtfully.

Name ________________________________ Code No.____________
Last First

Name of cooperating teacher____________________ School____________

I. EXPERIENCES AND ACTIVITIES

Listed on the following pages are various Teacher Aide experiences and activities.

(1) Check all your experiences and activities. This listing may be incomplete; therefore, add those which are missing.

(2) Evaluate your experiences and activities by placing a checkmark in one of the columns labelled "Especially valuable," "Valuable," "Not valuable."

Refer to your log while filling out this section.

OBSERVATION

		Especially valuable	Valuable	Not Valuable
Classroom				
___	___ (specify subject observed)	___	___	___
___	___ (specify subject observed)	___	___	___
___	___ (specify subject observed)	___	___	___
___	___ (specify subject observed)	___	___	___
___	___ (specify subject observed)	___	___	___
School plant				
___	Playground	___	___	___
___	Gym	___	___	___
___	Cafeteria	___	___	___
___	Library	___	___	___
___	Guidance-Counseling office	___	___	___
___	Nurse's office	___	___	___
___	Administrative offices	___	___	___
___	Audio-visual room	___	___	___
___	Study hall	___	___	___
___	Faculty dining room	___	___	___
___	Faculty lounge	___	___	___
___	Auditorium	___	___	___
___	___ (other: specify)	___	___	___
___	___ (other: specify)	___	___	___

OBSERVATION (Continued)

		Especially valuable	Valuable	Not Valuable
	Laboratories			
____	____________ (specify subject)	____	____	____
____	____________ (specify subject)	____	____	____
____	____________ (specify subject)	____	____	____
	Assemblies and other special programs			
____	____________ (specify program)	____	____	____
____	____________ (specify program)	____	____	____
____	**Film showings**	____	____	____
	Co- and extra-curricular activities			
____	____________ (specify activity)	____	____	____
____	____________ (specify activity)	____	____	____
____	____________ (specify activity)	____	____	____
	Other kinds of observations			
____	____________ (please specify)	____	____	____
____	____________ (please specify)	____	____	____
____	____________ (please specify)	____	____	____

TEACHING

		Especially valuable	Valuable	Not Valuable
____	"In front of class"	____	____	____
____	Part of a class or group of children	____	____	____
____	Working with individual children (Indicate if with children with special problems or characteristics) ______________ ______________________________	____	____	____

EXAMINING INSTRUCTIONAL MATERIALS, RECORDS, EQUIPMENT, ETC.

		Especially valuable	Valuable	Not Valuable
____	Lesson plans	____	____	____
____	Teacher guides and manuals	____	____	____
____	Student guides and manuals	____	____	____
____	Teacher grade books	____	____	____
____	Report cards	____	____	____
____	Textbooks	____	____	____
____	Workbooks	____	____	____
____	Displays	____	____	____
____	Class library	____	____	____
____	Models	____	____	____
____	Audiovisual equipment	____	____	____
____	Student records	____	____	____
____	Copies of standardized tests	____	____	____
____	Copies of teacher-made tests	____	____	____
____	______________________________ (other: specify)	____	____	____
____	______________________________ (other: specify)	____	____	____
____	______________________________ (other: specify)	____	____	____

ACTIVITIES RELATED TO TEACHING

		Especially valuable	Valuable	Not Valuable
____	Prepare tests	____	____	____
____	Correct tests	____	____	____
____	Correct homework	____	____	____
____	Record grades	____	____	____
____	Plan lesson	____	____	____
____	Look up records	____	____	____
____	Take attendance	____	____	____
____	Operate audio-visual equipment	____	____	____
____	Take book inventory	____	____	____
____	Prepare bulletin board	____	____	____
____	Decorate classroom	____	____	____
____	Set up displays	____	____	____
____	Prepare deficiency reports	____	____	____
____	Operate ditto and mimeograph machines	____	____	____
____	Prepare (type) stencils	____	____	____
____	Prepare flash cards	____	____	____
____	Assist in Library	____	____	____
____	Assist in laboratory	____	____	____
____	Serve as monitor (cafeteria, hall)	____	____	____
____	Order supplies	____	____	____
____	Assist in preparation for assembly and other programs	____	____	____
____	____________________ (other: specify)	____	____	____
____	____________________ (other: specify)	____	____	____
____	____________________ (other: specify)	____	____	____
____	____________________ (other: specify)	____	____	____

CONFERENCES AND DISCUSSIONS

	With:	Especially Valuable	Valuable	Not Valuable
___	Cooperating teacher	___	___	___
___	School administrators	___	___	___
___	Curriculum specialists	___	___	___
___	Guidance counselors	___	___	___
___	Other teachers	___	___	___
___	Students (informal)	___	___	___
___	___________________ (other: specify)	___	___	___
___	___________________ (other: specify)	___	___	___
___	___________________ (other: specify)	___	___	___

II. ESTIMATE OF TIME DEVOTED TO ACTIVITIES AND EXPERIENCES

Please indicate the approximate amount of time (to nearest hour) of each type of activity or experience.

Time (nearest hour)	Experience and Activity
___________	Observation
___________	Teaching
___________	Examining instructional materials, records, equipment, etc.
___________	Activities related to teaching
___________	Conferences and discussions

III. OVERALL ASSESSMENT OF TEACHER AIDE EXPERIENCES AND ACTIVITIES

Taking into consideration all your experiences and activities in the Teaneck School, how would you rate them?

Place a checkmark on the appropriate spot along the scale below:

(0) (1) (2) (3) (4) (5) (6) (7) (8) (9) (10)

↑ Worthless

↑ Extremely Worthwhile

Positive comments:

Negative comments:

IV. SEMINARS

Name of your seminar leader________________________________

Positive comments:

Negative comments:

V. REALIZATION OF THE OBJECTIVES OF THE TEACHER AIDE PROJECT

To what extent do you think that your experiences and activities as a teacher aide have.....

...helped you learn better the psychological theories and principles relevant to teaching?

____ Definitely yes

____ Probably yes

____ Don't know

____ Probably no

____ Definitely no

...increased your understanding of the many roles performed by teachers?

____ Definitely yes

____ Probably yes

____ Don't know

____ Probably no

____ Definitely no

...crystallized your decision to become or not become a teacher?

____ Definitely yes

____ Probably yes

____ Don't know

____ Probably no

____ Definitely no

VI. GENERAL COMMENTS

Kindly list specific criticisms of the Teacher Aide Program.

1. ____
2. ____
3. ____
4. ____
5. ____
6. ____
7. ____
8. ____
9. ____
10. ____

Kindly list specific suggestions for improving the Teacher Aide Program.

1. ____
2. ____
3. ____
4. ____
5. ____
6. ____
7. ____
8. ____
9. ____
10. ____

NOTE: This section to be filled out only by secondary school students.

Did you attend the two-day sessions at the Teaneck High School on March 25th and 26th (during our vacation)? ____Yes ____No

These two-day sessions were of......

- ____ Great value
- ____ Considerable value
- ____ Some value
- ____ Doubtful value

Comments (positive and/or negative):

THANK YOU.

Fairleigh Dickinson University

TEACHER AIDE PROGRAM

Teacher Aide Rating Form CT (Cooperating Teachers)

At the midsemester period of the program, we would appreciate very much your filling out this form. Your comments will help us guide the student so that he (she) and you can derive maximum benefit from this program.

Name of Teacher Aide__________________________ Date_________________

Name of Cooperating Teacher______________________ School_________________

1. So far, what were the major experiences and activities of the student? (e.g., observation of the class, tutoring, correcting tests, etc.)

2. To what extent does the student constructively contribute to your work?

3. To what extent does the student not constructively contribute to your work?

4. Assessment of student's personality and competence in human relations

(Check the appropriate column)

Cannot evaluate			Most of Time	About ½ Time	Seldom or Never
___	1.	Is enthusiastic in dealing with children	___	___	___
___	2.	Is kindly and sympathetic	___	___	___
___	3.	Is open to suggestions	___	___	___
___	4.	Demonstrates initiative	___	___	___
___	5.	Enjoys children and establishes good rapport with them	___	___	___
___	6.	Is cooperative	___	___	___
___	7.	Is dependable	___	___	___
___	8.	Is intellectually curious	___	___	___
___	9.	Shows social sensitivity	___	___	___
___	10.	Is emotionally stable	___	___	___
	11.	______________________ (add your own characteristic)	___	___	___
	12.	______________________ (add your own characteristic)	___	___	___

5. What are the student's strengths and weaknesses? Please cite specific or significant incidents.

6. Do you feel that the student will make a good teacher?

____ definitely yes   Reason(s) for your judgment:

____ probably yes

____ probably no

____ definitely no

____ can't really tell

7. Please feel free to comment of the Teacher Aide Program, e.g., problems which you have encountered, suggestions for improvement, etc.

THANK YOU FOR FILLING OUT THIS FORM AND RETURNING IT TO US.

Fairleigh Dickinson University

TEACHER AIDE PROGRAM

Teacher Aide Rating Form SL-M (Seminar Leaders)

At the midsemester period of the program, we would appreciate very much your giving us an evaluation of the student listed below in terms of your impressions gathered in the seminars. Your comments will help us guide the student so that he(she) can derive maximum benefit from this program.

Student____________________ Seminar Leader______________ Date__________

1. Please check the appropriate column

Cannot evaluate			Most of Time	About ½ Time	Seldom or Never
____	1.	Is open to suggestions	____	____	____
____	2.	Demonstrates initiative and leadership in discussions	____	____	____
____	3.	Participates in the discussions	____	____	____
____	4.	Considers the point of view of others (i.e., fellow-students and your own)	____	____	____
____	5.	Is intellectually curious	____	____	____
____	6.	Shows social sensitivity	____	____	____
____	7.	Is cooperative	____	____	____
____	8.	Is dependable (i.e., attends sessions regularly and on time)	____	____	____
____	9.	Is emotionally stable	____	____	____
____	10.	Appears to be enthusiastic about becoming a teacher	____	____	____
	11.	______________________________ (add your own characteristic)	____	____	____
	12.	______________________________ (add your own characteristic)	____	____	____

2. What are the student's strengths and weaknesses? Please cite specific or significant incidents.

3. Do you feel that the student will make a good teacher?

____ definitely yes

____ probably yes

____ probably no

____ definitely no

____ can't really tell

Reason(s) for your judgment.

____
Your signature

THANK YOU FOR FILLING OUT THIS FORM AND RETURNING IT TO US.

Fairleigh Dickinson University

TEACHER AIDE PROGRAM

Teacher Aide Rating Form SL-E (Seminar Leaders)

At the conclusion of the program, we would appreciate very much your giving us an evaluation of the student listed below in terms of your impressions gathered in the seminars.

Student______________________ Seminar Leader__________ Date____________

1. Please check the appropriate column

Cannot evaluate			Most of Time	About ½ Time	Seldom or Never
___	1.	Is open to suggestions	___	___	___
___	2.	Demonstrates initiative and leadership in discussions	___	___	___
___	3.	Participates in the discussions	___	___	___
___	4.	Considers the point of view of others (i.e., fellow-students and your own)	___	___	___
___	5.	Is intellectually curious	___	___	___
___	6.	Shows social sensitivity	___	___	___
___	7.	Is cooperative	___	___	___
___	8.	Is dependable (i.e., attends sessions regularly and on time)	___	___	___
___	9.	Is emotionally stable	___	___	___
___	10.	Appears to be enthusiastic about becoming a teacher	___	___	___
	11.	____________________ (add your own characteristic)	___	___	___
	12.	____________________ (add your own characteristic)	___	___	___

2. What are the student's strengths and weaknesses? Please cite specific or significant incidents.

3. Do you feel that the student will make a good teacher?

____ definitely yes

____ probably yes

____ probably no

____ definitely no

____ can't really tell

Reason(s) for your judgment:

____
Your signature

THANK YOU FOR FILLING OUT THIS FORM AND RETURNING IT TO US.

Fairleigh Dickinson University

TEACHER AIDE PROGRAM

Seminar Reactionnaire - SL-M

Seminar Leader________________________________ Date________________

The purpose of the seminars is (a) to enable students to discuss and share their Teacher Aide experiences and (b) to help students integrate the theoretical knowledge acquired in the college classroom lectures with their practical experience in the school classroom.

1. To what extent do you feel that the seminars realize these objectives?

2. Based on students' comments, which Teacher Aide experiences and activities do they regard as particularly valuable, i.e., enhance their professional growth?

3. Which experiences and activities do they regard as not particularly valuable?

4. Based on students' comments and your own observations, to what extent do our classroom lectures give students a theoretical foundation, i.e., how valuable are our lectures? (PLEASE BE FRANK.)

5. General Comments: On the reverse side of this sheet please offer any comments, criticisms, suggestions, etc., which would help us improve the program.

Thank you.

Fairleigh Dickinson University

TEACHER AIDE PROGRAM

Seminar Reactionnaire - Form SL-E

1. If it were possible would you recommend that the Teacher Aide Program become an integral part of teacher training prior to student teaching? WHY?

2. Do you believe that it would be worthwhile to extend the program, perhaps with emphasis upon observation, to courses in Child and Adolescent Development which, in the current FDU curriculum precede Educational Psychology? WHY?

3. What specific criticisms do you have of the present program?

4. What specific suggestions do you have which could improve the program?

Fairleigh Dickinson University

RUTHERFORD TEANECK MADISON

TEANECK CAMPUS
Teaneck, New Jersey
Area Code 201
836-6300

Dear

The bearer of this letter, Mr.
Miss ______________________________
Mrs.

will serve as your Teacher Aide every ______________________________

between ______________________________ for the next 14 weeks.

Sincerely,

Irvin Hochman, Ph.D.
Assistant Professor of Psychology

IH/lck

- -

Teacher Aide's Attendance Record

Kindly enter the dates on which the Teacher Aide works with you.

February ______________________________

March ______________________________

April ______________________________

May ______________________________

MEMO TO: Miss Cundari
Mr. Kelly
Mr. Lewis
Mrs. McIlfatrick
Mr. Massa
Mr. Wangler
Mr. Winn

FROM: Drs. Lang and Hochman

DATE:

Towards the middle of the semester you were kind enough to fill out a "Seminar Reactionnaire." In this you gave us your opinions with respect to a number of important areas: the extent to which the seminars achieve their objectives; experiences and activities which our Teacher Aides regard as particularly valuable (not valuable); and the extent to which our lectures give students a theoretical foundation. You also offered a number of helpful suggestions regarding ways of improving the program.

Several of the seminar leaders asked to reserve judgments with respect to certain aspects of the areas cited above.

May we please call upon you to give us the benefit of a full semester's experience? We are especially anxious to have your frank criticisms and suggestions. Will you please record these on the form entitled Seminar Reactionnaire - Form SL-E. Finally, kindly complete the second (and last) Teacher Aide Rating Form SL-E.

We are grateful for your cooperation.

/S/ Gerhard Lang

/S/ Irvin Hochman

P.S. Your checks will be mailed out during May.

COPY

June 12, 1964

Dr. Harvey B. Scribner
Superintendent, Teaneck Public Schools
1 West Forest Avenue
West Englewood, New Jersey

Dear Dr. Scribner:

With the close of the 1964 spring semester, the "field" portion of our Teacher Aide Project has been completed. During the coming summer months we will be occupied with the analysis of test results and other data and with the preparation of the final report of our findings to the U. S. Office of Education. You, as well as all the Teaneck School personnel who assisted us in this project, will receive a copy of our report.

Over 150 Fairleigh Dickinson education students, including the 53 teacher aides placed in your schools participated in this study. We are deeply indebted to the 31 cooperating teachers (see attached list) who supervised these teacher aides. They most generously assumed the responsibility for providing our students with the opportunity to observe classrooms and children, to assist in the preparation of instructional materials, to tutor individual students, in some instances teach a part of a lesson, and to generally perform necessary routine classroom duties. We wish space permitted us to describe how excited and impressed our teacher aides were with the work of the Teaneck schools. It literally was an "eyeopener" for many of them.

While our quantitative results have not yet been analyzed, Alfred North Whitehead's oft repeated complaint about studies "from which nothing follows" does not seem to apply here. Our interviews with our teacher aides revealed that they had had a meaningful learning experience, one that should prepare them for further learning and personal growth. When they report for their student teaching assignment in their senior year, we believe that they will face this important and often anxiety provoking experience with greater confidence and commitment to the teaching profession.

May we also single out for recognition the seminar leaders (see attached list) who helped the students integrate the theoretical content of our lectures with their classroom observations and experiences. They represented for our students an exposure to individuals who personified experience, competence and leadership in public education.

We are particularly grateful to Mr. Ray Kelly, Elementary School Curriculum Coordinator, and Mr. James L. Winn, Secondary School Curriculum Coordinator, who patiently worked out the many details of student assignments. Their advice and intimate knowledge of the workings of the schools made it possible not only for the students to better integrate theory and practice, but also for us as well!

May we also express our thanks to the school principals for their interest and cooperation. They helped set the stage for the project and in our discussions with them they provided us with many valuable insights into ways and means of improving the program.

Finally, Dr. Scribner, without your support and that of the Teaneck Board of Education, our project would not have been at all possible. For this you have our deepest appreciation.

Sincerely yours,

Gerhard Lang, Ph.D.
Associate Professor of Psychology

Irvin Hochman, Ph.D.
Assistant Professor of Psychology

lck

copies to: Teaneck personnel
per attached list

Eugene Field School

Miss Joan M. Mazza
Mrs. Bette Kelly
Mrs. Sarah Clatworthy
Mrs. Eileen Pierce
Mrs. Mary Kahiser
Mrs. Margaret Kirsch

Lowell School

Mrs. Esther Van Duzer
Mrs. Rona Burak
Mrs. Joyce Greenup
Miss Aimee Jacod
Mrs. Bernice Levine
Mrs. Cornelia Meyer

Emerson School

Mrs. Sara Reissman
Miss Margaret Alagia
Miss Lucy Stamilla
Mrs. Eleanor Kasmir
Mrs. J. Antinoro
Mrs. E. Clausen
Mrs. Diane Vojack
Mr. John L. Salek

Benjamin Franklin Jr. High School

Mr. Albert Guskind

Teaneck High School

Mrs. Margaret Heller
Mrs. Susan Candell
Mr. John L. Reid
Mr. Franklin P. Gould
Mr. James R. Delaney
Mr. Frank T. Arone
Mr. Ira Cebulash
Mr. Donald Kouba
Mr. Mario E. Amato
Mr. William F. Powley

Seminar Leaders

Miss Vincentine Cundari
Mr. Arthur Lewis
Mr. Emil Massa
Mr. Kenneth J. Wangler
Mrs. Edna McIlfatrick
Mr. M. Ray Kelly - Curriculum
Coordinator, Elementary
Mr. James L. Winn - Curriculum
Coordinator, Secondary

School Principals

Mr. William G. Harrison,
Emerson School
Miss M. Gertrude Hafner,
Eugene Field School
Mr. Sydney Bookstaber,
Lowell School
Miss Helen B. Hill,
Teaneck High School
Mr. John Simmons,
Benjamin Franklin Junior
High School

APPENDIX C

Guides for Cooperating Teachers and Teacher Aides

Fairleigh Dickinson University

TEACHER AIDE PROGRAM

Guide for Cooperating Teachers

Objectives of the program

Fairleigh Dickinson University, like several other universities throughout the country, is very much interested in exploring ways and means of improving teacher education. To that end, during the coming semester we have instituted the Teacher Aide program, one of the experimental features of Educational Psychology, a course required of all students in teacher training. We would like to enrich and integrate the theoretical knowledge acquired in the college class lectures with firsthand experience in the schools. Also, we hope that our students will increase their understanding of the many roles performed by teachers and crystallize their own commitment to a teaching career. The Teacher Aides will have the opportunity to discuss their observations and experiences in weekly seminars led by personnel from the Teaneck school system.

Criteria for selecting Teacher Aide activities

The program provides that participating college students serve about two hours per week for 14 weeks as Teacher Aides, i.e., about 28 hours per semester. We feel that we should not rigidly specify the kind of assignment or experience which the Teacher Aide should have every week. We do rely upon the good judgment of the cooperating teacher to utilize the services of the Teacher Aide in such a way that he will get a feeling of what it means to be a teacher, day in and day out. Certainly an activity can be considered appropriate if it meets the following criteria:

(1) The activity should enhance the student's professional growth and be related to his future role as a teacher;

(2) The activity should realistically expose the Teacher Aide to teaching and to the school's activities prior to his student teaching experiences;

(3) The activity should contribute constructively to the work performed at the school, or, at the least, not interfere greatly with the efficient conduct of the school's program.

Suggested experiences for Teacher Aides

A. Observation

1. classroom (individual pupils, interaction between pupils, teaching methods, classroom management, classroom arrangement, etc.)
2. school plant
3. administrative organization and regulations
4. library
5. laboratories
6. assemblies and other special programs
7. pupils' co-curricular activities

B. Teaching

Assisting in teaching groups of pupils and tutoring individual pupils.

C. Teaching-related activities

1. preparing instructional materials
2. participate in lesson planning
3. correcting homework and tests
4. keeping records
5. looking up records
6. operate audio-visual equipment

D. Conferences and meetings

1. with cooperating (supervising) teacher
2. with school administrators
3. with curriculum specialists
4. with guidance counselors

Evaluation of program

At the end of the Teacher Aide service, we would like cooperating teachers to fill out a rating form which is designed to assess the quality of the service performed by the student and allows the cooperating teacher to judge the student's potential for becoming a good teacher.

Concluding comments

Students are committed to work with you for a period of 14 weeks. Teacher Aide service is part of the student's course requirements; therefore, absences from school will be tolerated only under exceptional circumstances. Kindly enter the dates on which the Teacher Aide works with you at the bottom of the letter of introduction which the student will give you at his first visit to your school.

If any misunderstandings should arise between you and the Teacher Aide assigned to you, please contact immediately your building principal or Mr. Ray Kelly who, in turn, will take the matter up with the appropriate University official.

The success of this venture depends greatly upon you and the other cooperating teachers. We greatly appreciate your splendid cooperation.

SURED Project #2

(School and University Relationship for Educational Development)

Project Staff

Directors: Dr. Gerhard Lang, Associate Professor of Psychology
Fairleigh Dickinson University

Dr. Irvin Hochman, Assistant Professor of Psychology
Fairleigh Dickinson University

Consultants: Dr. Robert L. Thorndike, Professor of Education
Teachers College, Columbia University

Dr. Amedeo G. Sferra, Professor of Psychology and Chairman
Psychology Department, Teaneck Campus
Fairleigh Dickinson University

Dr. Maurie Hillson, Professor of Education
Fairleigh Dickinson University

Teaneck Public School Project Coordinator: Mr. Ray Kelly
Elementary School Curriculum Coordinator

The Teacher Aide Program is a joint project of the College of Liberal Arts (Dr. Loyd Haberly, Dean), the College of Education (Dr. John J. O'Neill, Dean), and the Teaneck Public Schools (Dr. Harvey Scribner, Superintendent).

Fairleigh Dickinson University

TEACHER AIDE PROGRAM

Guide for Teacher Aides

Suggestions

1. Please read carefully the Guide for Cooperating Teachers.

2. Please appear on time for your weekly school visit and remain for the two-hour period to which you are committed.

3. Please record in detail your weekly activities, your reactions and impressions. A log has been given to you for that purpose.

4. Set a good example for the pupils with whom you will be working in terms of courtesy, cooperation with the supervising teacher, appropriate dress, and observations of school regulations.

5. If any misunderstandings should arise between you and the cooperating teacher, immediately inform your instructor.

Suggested Observations

A. Classroom
    1. Physical features: care and planning of room; arrangement of furniture; exhibits and displays.
    2. Learning activities and teacher-pupil relationships: diversity of teaching methods; methods of motivation, discipline, encouragement of individual growth, encouragement of group cooperation; objectives of lesson(s) taught and methods of evaluating pupils' work; teacher-pupil rapport.
    3. Pupil-pupil relationships: degree of cooperation, mutual respect, friendliness, sensitivity to rights of others, evidence of bullying, teasing, rowdiness, leadership exercised by some pupils.

B. School Plant

C. Administrative Organization and Regulations

D. Library

E. Laboratories

F. Assemblies and other Special Programs

G. Co-curricular Activities

Your School:____________________ Name of your cooperating teacher:__________

Time for Teacher Aide Service:____________________________

APPENDIX D

Course Syllabus

Fairleigh Dickinson University
College of Arts and Sciences
Psychology Department
Teaneck, N. J.

#19: Educational Psychology, Section______ Dr. G. Lang

Office________________ Hours__________ Dr. I. Hochman

Objectives:

(1) To survey and critically analyze current psychological theories and principles relevant to teaching;

(2) To increase students' understanding of the many roles performed by teachers;

(3) To help students crystallize their commitment to a teaching career.

Program: The program will include a variety of experiences, such as lectures, class discussions, seminars, Teacher Aide Service, film showings, and demonstrations.

Requirements:

(1) Reading assignments should be completed at or before the specified class sessions to increase understanding of lectures and to enrich class discussion.

(2) All tests must be taken at the specified periods. Make-up tests will be given only where extreme conditions prevent taking the scheduled test.

(3) Class participation is desired and will be considered when grades are assigned. The criterion for evaluation will be *quality*, not quantity.

Text: Lindgren, Henry Clay. *Educational Psychology in the Classroom.* (2nd ed.) New York: Wiley, 1962.

References:

Gage, N. L. (Ed.) *Handbook of Research on Teaching.* Chicago: Rand McNally, 1963.

Noll, V. H. and Noll, R. P. *Readings in Educational Psychology.* New York: Macmillan, 1962.

Educational Testing Service. *Selecting an Achievement Test.* Princeton: E.T.S., 1958 (Pamphlet #3)

Psychological Corporation. Test *Service Bulletins.* (#48, #50, #54)

Tests: Three tests and a final examination will be given.

Evaluation: The final grade will be based upon test performance, the quality of class participation and, where appropriate, the quality of teacher aide service performed.

Course Topics

Note: The number in ( ) refers to the approximate number of weeks which will be devoted to each topic.

I - Foundations of Educational Psychology (1) (Lindgren, chapter 1)

- A- Meaning of Education.
- B- Trends in Educational Psychology
- C- Psychological research methods

II - Human Growth, Development, and Socialization (3) (Lindgren, chapters 3,4) (Erikson: A healthy personality for every child)

- A- Basic Principles of growth and development
- B- The self concept
- C- Stages of development

III - Motivation and Learning (4) (Lindgren, chapters 2, 7 - 11)

- A- Motivation
- B- Reinforcement (Stimulus-Response) theory of learning
- C- Field (Cognitive) theory of learning
- D- Problem-solving
- E- Emotions and learning
- F- Perceptions and attitudes
- G- Management of learning
- H- Programed instruction

IV - Group Dynamics and Classroom Management (2) (Lindgren, chapters 5, 12, 13)

- A- Interpersonal relations in the classroom
- B- Discipline

V - Measurement, Testing, and Evaluation (3) (Lindgren, chapter 14,15) (E.T.S. pamphlet #3) (Test Service Bulletins #48, #50, #54)

- A- Concepts, principles, and practices
- B- Teacher-made and standardized tests
- C- Grading and reporting

VI - Mental Health in the Classroom (1) (Lindgren, chapters 6, 16 - 18)

- A- Exceptional children
- B- Guidance
- C- Psychology of the teacher

APPENDIX E

Master List of Teacher Roles

1. Director of learning (source of knowledge, mediator of learning, helper in the learning process)
2. Disciplinarian (monitor)
3. Parent substitute (parent surrogate)
4. Judge (referee, screener, evaluator)
5. Confidante (friend, advisor, guide, comforter, understander)
6. Surrogate of middle class morality (representative of society, mediator of culture)
7. Detective
8. Object of identification (idol)
9. Target of hostile feelings (scapegoat)
10. Object of affection and crushes
11. Group leader (supervisor, authority figure, leader of extra-curricular activities)
12. Employee (public servant)
13. Colleague
14. Member of a profession (leader for change)
15. Citizen (participant in community affairs)
16. Researcher
17. Liaison officer (between school and community, students and administration, etc.)
18. Advisor to superior (consultant)
19. Organizer (administrative assistant)
20. Clerk
21. Motivator
22. Coach
23. Student

Master List of Duties and Assignments Teachers Have in Addition to Classroom Instruction

1. Maintain records and reports
2. Attend meetings (school, faculty, PTA, committees)
3. Monitorial functions (hall, lunchroom, playground, traffic, bus)
4. Handling money (milk, fund drives, tickets)
5. Arrange, help with assemblies, commencement exercises
6. Sponsoring pupil organizations (faculty advisor)
7. Administrative assignments
8. Attend conventions
9. Coaching athletics
10. Counseling (children, parents)
11. Undertake research
12. Arrange classrooms (bulletin board, pets, exhibits)
13. Preparing teaching materials

(Continued on next page)

14. Preparing, administering, and correcting tests
15. Correcting homework
16. Personal study (keeping up with events, taking courses)
17. Conducting field trips
18. Participate in community affairs
19. Tutoring individual students (give extra help to students)

APPENDIX F

Student Data of Instructor Robbins

An opportunity presented itself to administer our battery of tests to a group of 26 students enrolled in an educational psychology course taught by Mr. Gerald Robbins at another campus of Fairleigh Dickinson University. These students were not part of our sample. The orientation and content of this cours were different than ours. Also, a different text was used by Mr. Robbins. We felt it would be interesting to see how this group of students might fare on our criterion tests. The results are shown below:

Student Data of Instructor Robbins (N = 26)

Variable	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.
Achievement Test in Ed. Psych.	64.42	8.18	70.48	9.13
Case Studies in Teaching	15.42	2.02	17.24	11.46
Teacher Roles	3.88	1.50	3.77	1.69
Teacher Duties	2.77	1.80	2.65	1.36
Certainty of Decision to Teach	76.46	15.15	76.23	15.91

An analysis of variance of pretest scores showed that this group of students did not differ significantly from the subjects comprising the project's three treatment groups.

With the exception of the ATEP, none of the mean differences in posttest-pretest scores were significant.

The posttest means on the ATEP, teacher roles, and teacher duties were significantly lower than those of the project's three treatment groups.

These results are understandable in view of the different experiences which Mr. Robbins' students were exposed to as compared to those of our project students.